

Research Note 84-89

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PSYCHOMETRIC PROPERTIES OF QUESTIONNAIRE ITEMS USED
IN EVALUATING THE NEW INITIAL ENTRY TRAINING COURSE

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This report is one of a series that describes the development and implementation of a major training evaluation of the new program of instruction (POI) for drill sergeants. This report focuses on the use of four questionnaires--(1) The Company Commander Questionnaire, (2) First Sergeant Questionnaire, (3) Drill Sergeant Questionnaire, and (4) Soldier's Questionnaire. The report describes the general psychometric properties of the items included in each of the four questionnaires, and a chapter is devoted to each. A broad range of possible		

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CHAPTER 1

INTRODUCTION

This report is one of a series describing the development and implementation of a major training evaluation project carried out by ARRO under the sponsorship of TRADOC, through a contract with the Army Research Institute. The evaluation of the new program of instruction (POI) for drill sergeants involved the use of four separate questionnaires, plus a unit-level information form. The questionnaires were filled out by the company commander, the first sergeant, the drill sergeants, and a sample of trainees in each unit. The background of the evaluation, as well as a detailed description of the questionnaires and forms used, along with the procedures for administering them are reported elsewhere and will not be discussed here. The purpose of this report is to describe the general psychometric properties of the questionnaire items and to make recommendations about the use of those items in evaluating the effects of the new program of instruction for drill sergeants and unit cadre.

The general philosophy used in developing the questionnaires was to sample a broad range of possible indicators and criteria that might reflect the impact of differential training of drill sergeants. Therefore, the questionnaires contain large numbers of items dealing with many different aspects of the situation, including perceptions of the behavior of specific training personnel. The drill sergeant training under evaluation was divided into a number of different modules, each of which should be reflected in certain types of behavior occurring with more or less frequency in the training setting. Therefore, a majority of the items in the various questionnaires focus on these types of behaviors. The questionnaires were also designed in such a way that the same individual would be observed from different perspectives whenever possible. Thus, the drill sergeant, who is the focus of the evaluation, is described by the trainees, as well as the first sergeant and the company commander. In addition, the drill sergeant also has the

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opportunity to describe his or her own behavior. This multiple focus allows a certain degree of correction for the fact that perceptual biases inevitably creep into behavioral ratings of this type. Since the program of instruction also dealt with attitudinal aspects of training, a number of items also included in the various questionnaires dealt with individual attitudes, plus general unit atmosphere items. The latter are assumed to more generally reflect individual attitudes of the drill sergeants and other cadre members.

To the extent possible, each major area to be assessed in the evaluation, as outlined in the Research Design Technical Report, had several items designed to tap that dimension, rather than a single item. The use of multiple items to assess a single dimension had the goal of the development of scales composed of two or more individual items, as well as the elimination of items that turned out not to be very useful. Scales composed of several items are, of course, generally more reliable than individual items. Once a reliable scale had been identified and created, additional redundant items could be eliminated, thereby shortening the questionnaires, while at the same time creating more reliable scales.

The analyses of each of the questionnaires are reported in separate chapters. Since each questionnaire contains two or more logical groupings of items, depending on the focus of the items, the internal structure of each chapter reflects the organization of the questionnaire dealt with in that chapter. The final chapter in this report summarizes the analyses of the various questionnaires, and discusses the implications for the actual use of these items in the formal evaluation procedure. The training evaluation itself is reported in a separate and subsequent report. Before moving to the analyses of specific questionnaires, a few comments about the analyses are in order.

The primary statistical technique used to analyze and cluster the items in the various questionnaires was the factor analysis, using principal axis procedures with varimax rotations. A problem common to virtually all of the analyses was the tendency for a huge first factor to appear. This factor, accounting for anywhere from 10 to 43

percent of the variance of the item set, often meant that there was a global evaluative set that reduced our ability to define clearly differentiated scales. This tendency was much more pronounced in describing individuals than with less personalized "climate" type items. In a few cases, the analyses were so messy and difficult to interpret that it did not seem reasonable to define a large number of scales. This problem will be elaborated on later.

The usual criteria for selecting the best rotated factor structure, including examining the Eigen values and the change in percent of variance accounted for by each additional factor, were of course utilized. However, the difficulties we encountered, as briefly mentioned above, meant that to a much greater extent than usual, a subjective judgment of the "psychological meaningfulness" and criterial utility was involved in deciding on the optimal factor structure.

The routine procedure for examining various structures was to instruct the SPSS program to define six principal axis factors and then rotate to a six, five, four, three, and two factor solution. All solutions were examined regardless of the information provided by the Eigen value, which usually indicated that a two or three factor solution would have been best. When it appeared that all six factors in the six factor solution were meaningful and contained at least two highly loading items in each factor, a seventh, eighth, and ninth factor solution was then called for and examined. This additional set of rotations was needed in only a couple of instances. For basic screening purposes, factor loadings in excess of .40 were considered to be significant, although our preference for interpretation was to focus on those with loadings in excess of .60. As will become apparent in the analyses of the soldier questionnaire, loadings above .50 tended to be of adequate stability, while those in the .40's were much more likely to bounce in and out of replications. It should also be kept in mind that when factor loadings are presented, the sign of the loading (positive or negative) reflects the content of the item and the type of scale being used. Since some scales are reversed, a positive sign does not always indicate a "positive" response to that item.

A key to the item codes used in the Tables throughout this report is presented in the Appendix.

CHAPTER 2

COMPANY COMMANDER QUESTIONNAIRE

The company commander questionnaire contained two separate item sets, one describing the battalion commander and the other a general climate and perceptual item set. Means and standard deviations of these items are presented in Tables 1 and 2. Variations in the n 's reflects the effect of missing data, and the samples are identical to those used in the factor analyses below.

General Items

There were 42 general items in the company commander questionnaire with 81 usable observations. This ratio of observations to items is far below the "minimum acceptable" rule of thumb of five observations per item. Therefore, as is also the case with the first sergeant analyses, it is necessary to exercise considerable caution in generalizing the factor structures obtained. Normally our rule of thumb would be to show extreme conservatism by selecting a rotated factor solution with only a few factors. Two aspects of the current data set permitted us to be much more liberal in our choice of the most meaningful solution. For one thing, the amount of variance accounted for by the first factor was not excessively larger than the amount accounted for by subsequent factors, as was typically the case with most of the other analyses (and is typical of most factor analyses). The first principal axis factor accounted for 11.1 percent of the variance, while the second accounted for 8.9 percent of the variance. A gentle tapering off of the amount of variance accounted for by subsequent factors occurred in a manner typical of this type of analysis.

A second characteristic of these data was the much reduced amount of cross-loading of items in contrast to several of the other analyses described later in this report. This resulted in more clearly defined factors, and, as it turns out, assisted in the interpretation of the factors in several other data sets. Related to this characteristic was the

TABLE 1
COMPANY COMMANDER QUESTIONNAIRE:
GENERAL ITEMS

VARIABLE	MEAN	STANDARD DEV	CASES
VAR1	4.1481	.8383	81
VAR2	4.4074	.7546	81
VAR3	4.6667	.9487	81
VAR4	4.6667	1.2266	81
VAR5	4.6667	1.1450	81
VAR6	4.6667	1.1240	81
VAR7	4.6667	1.2455	81
VAR8	4.6667	1.1070	81
VAR9	4.6667	1.1688	81
VAR10	4.6667	1.0088	81
VAR11	4.6667	1.1111	81
VAR12	4.6667	1.1888	81
VAR13	4.6667	1.0966	81
VAR14	4.6667	1.1491	81
VAR15	4.6667	1.1491	81
VAR16	4.6667	1.1266	81
VAR17	4.6667	1.2222	81
VAR18	4.6667	1.1333	81
VAR19	4.6667	1.1333	81
VAR20	4.6667	1.1333	81
VAR21	4.6667	1.1333	81
VAR22	4.6667	1.1333	81
VAR23	4.6667	1.1333	81
VAR24	4.6667	1.1333	81
VAR25	4.6667	1.1333	81
VAR26	4.6667	1.1333	81
VAR27	4.6667	1.1333	81
VAR28	4.6667	1.1333	81
VAR29	4.6667	1.1333	81
VAR30	4.6667	1.1333	81
VAR31	4.6667	1.1333	81
VAR32	4.6667	1.1333	81
VAR33	4.6667	1.1333	81
VAR34	4.6667	1.1333	81
VAR35	4.6667	1.1333	81
VAR36	4.6667	1.1333	81
VAR37	4.6667	1.1333	81
VAR38	4.6667	1.1333	81
VAR39	4.6667	1.1333	81
VAR40	4.6667	1.1333	81
VAR41	4.6667	1.1333	81
VAR42	4.6667	1.1333	81
VAR43	4.6667	1.1333	81
VAR44	4.6667	1.1333	81
VAR45	4.6667	1.1333	81
VAR46	4.6667	1.1333	81
VAR47	4.6667	1.1333	81
VAR48	4.6667	1.1333	81
VAR49	4.6667	1.1333	81
VAR50	4.6667	1.1333	81
VAR51	4.6667	1.1333	81
VAR52	4.6667	1.1333	81
VAR53	4.6667	1.1333	81
VAR54	4.6667	1.1333	81
VAR55	4.6667	1.1333	81
VAR56	4.6667	1.1333	81
VAR57	4.6667	1.1333	81
VAR58	4.6667	1.1333	81
VAR59	4.6667	1.1333	81
VAR60	4.6667	1.1333	81
VAR61	4.6667	1.1333	81
VAR62	4.6667	1.1333	81
VAR63	4.6667	1.1333	81
VAR64	4.6667	1.1333	81

TABLE 2
COMPANY COMMANDER QUESTIONNAIRE:
BATTALION COMMANDER ITEMS

VARIABLE	MEAN	STANDARD DEV	CASES
VAR42	2.030	1.081	77
VAR43	2.013	1.075	77
VAR44	2.033	1.071	77
VAR45	2.067	1.065	77
VAR46	2.117	1.063	77
VAR47	2.070	1.060	77
VAR48	2.127	1.054	77
VAR49	2.070	1.055	77
VAR50	2.077	1.060	77
VAR51	2.090	1.060	77
VAR52	2.093	1.063	77
VAR53	2.090	1.067	77
VAR54	2.080	1.068	77
VAR55	2.046	1.060	77
VAR56	2.046	1.062	77
VAR57	2.055	1.066	77
VAR59	2.055	1.068	77
VAR60	2.055	1.068	77
VAR61	2.055	1.068	77
VAR62	2.055	1.068	77
VAR63	2.055	1.068	77
VAR64	2.055	1.068	77
VAR65	2.055	1.068	77
VAR66	2.055	1.068	77
VAR67	2.055	1.068	77
VAR68	2.055	1.068	77
VAR69	2.055	1.068	77
VAR70	2.055	1.068	77
VAR71	2.055	1.068	77
VAR72	2.055	1.068	77
VAR73	2.055	1.068	77
VAR74	2.055	1.068	77
VAR75	2.055	1.068	77
VAR76	2.055	1.068	77
VAR77	2.055	1.068	77
VAR78	2.055	1.068	77
VAR79	2.055	1.068	77
VAR80	2.055	1.068	77
VAR81	2.055	1.068	77
VAR82	2.055	1.068	77
VAR83	2.055	1.068	77
VAR84	2.055	1.068	77
VAR85	2.055	1.068	77
VAR86	2.055	1.068	77
VAR87	2.055	1.068	77
VAR88	2.055	1.068	77
VAR89	2.055	1.068	77
VAR90	2.055	1.068	77
VAR91	2.055	1.068	77
VAR92	2.055	1.068	77
VAR93	2.055	1.068	77
VAR94	2.055	1.068	77
VAR95	2.055	1.068	77

fact that the factor structures presented fairly easy interpretations. In addition, the factors tended to remain stable with varying rotated solutions. Therefore, while keeping in mind that the sizes of the loadings are likely to change substantially and that some items will inevitably appear or disappear with replication of the analysis on other data, we expect that the meaningfulness of the dimensions will, in general, tend to remain stable over replications. For these reasons, the six factor solution was chosen as being meaningful, and is described in the paragraphs below. The complete solution is presented in Table 3.

Factor one dealt with the overall quality of the cadre and included the following items:

- All in all, officers in this unit do a fine job (.56).
- Suggestions made by drill sergeants for improving performance in their units are often implemented by their superiors or by the cadre (.58).
- Drill sergeants get good support from all of the cadre in this unit (.62).
- Trainees in this unit are often abused by the drill sergeant (-.54).
- Trainees in this unit are often abused by cadre who are not drill sergeants (-.65).

The presence of the following items on *factor one*, with somewhat lower loadings, suggests a kind of blame avoidance when problems arise that might reflect on the quality of the cadre. These two items are:

- I wish the trainees were of the same quality they were in the days of the draft (.47).
- I sometimes get the feeling that about the only kinds of people volunteering for the Army nowadays are those who have been rejected everywhere else (.43).

TABLE 3

COMPANY COMMANDER QUESTIONNAIRE: VARIMAX ROTATED FACTOR MATRIX OF GENERAL ITEMS

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6
VAR1	.19204	.06596	.48319	-.10474	.22773	.11965
VAR2	.36061	-.03308	.17033	-.05105	.02642	-.00948
VAR3	.62811	-.03331	.15516	-.08376	-.35952	-.61183
VAR4	.02001	.07074	-.05532	-.41869	-.09467	-.01611
VAR5	.03141	.14139	.71583	-.00811	.62058	.04011
VAR6	.13712	.06589	.72729	.12447	.64180	.09285
VAR7	.06170	.33682	.41570	.50972	.48258	.18448
VAR8	.12837	.01082	.04223	.32402	.17979	.07511
VAR9	.19249	.01082	.37931	-.26705	-.07739	.33023
VAR10	.23046	.02694	.09167	-.00375	.24280	.08762
VAR11	.34283	-.02567	.02677	.63861	-.04390	.12498
VAR12	.17178	.64470	.08533	.33363	.06307	.23498
VAR13	.07292	.06638	.10623	.27420	-.09671	.03260
VAR14	.57577	.10033	.01438	.11617	.08300	.04127
VAR15	.31309	.04033	.06031	.39136	.24439	.24867
VAR16	.54174	.25092	.09228	.62925	-.06705	.23847
VAR17	.04551	-.02463	.27711	-.03920	.26747	.13461
VAR18	.23567	.15392	.41527	.23843	-.05441	.28953
VAR19	.25563	.28037	.41099	.20466	.50999	.03800
VAR20	.02748	.63165	.04237	.04964	.31062	.18528
VAR21	.03581	.00923	.14057	-.04952	.35923	.03522
VAR22	.03581	.00923	.14057	-.04952	.35923	.03522
VAR23	.03581	.00923	.14057	-.04952	.35923	.03522
VAR24	.03581	.00923	.14057	-.04952	.35923	.03522
VAR25	.03581	.00923	.14057	-.04952	.35923	.03522
VAR26	.03581	.00923	.14057	-.04952	.35923	.03522
VAR27	.03581	.00923	.14057	-.04952	.35923	.03522
VAR28	.03581	.00923	.14057	-.04952	.35923	.03522
VAR29	.03581	.00923	.14057	-.04952	.35923	.03522
VAR30	.03581	.00923	.14057	-.04952	.35923	.03522
VAR31	.03581	.00923	.14057	-.04952	.35923	.03522
VAR32	.03581	.00923	.14057	-.04952	.35923	.03522
VAR33	.03581	.00923	.14057	-.04952	.35923	.03522
VAR34	.03581	.00923	.14057	-.04952	.35923	.03522
VAR35	.03581	.00923	.14057	-.04952	.35923	.03522
VAR36	.03581	.00923	.14057	-.04952	.35923	.03522
VAR37	.03581	.00923	.14057	-.04952	.35923	.03522
VAR38	.03581	.00923	.14057	-.04952	.35923	.03522
VAR39	.03581	.00923	.14057	-.04952	.35923	.03522
VAR40	.03581	.00923	.14057	-.04952	.35923	.03522
VAR41	.03581	.00923	.14057	-.04952	.35923	.03522
VAR42	.03581	.00923	.14057	-.04952	.35923	.03522
VAR43	.03581	.00923	.14057	-.04952	.35923	.03522
VAR44	.03581	.00923	.14057	-.04952	.35923	.03522
VAR45	.03581	.00923	.14057	-.04952	.35923	.03522
VAR46	.03581	.00923	.14057	-.04952	.35923	.03522
VAR47	.03581	.00923	.14057	-.04952	.35923	.03522
VAR48	.03581	.00923	.14057	-.04952	.35923	.03522
VAR49	.03581	.00923	.14057	-.04952	.35923	.03522
VAR50	.03581	.00923	.14057	-.04952	.35923	.03522
VAR51	.03581	.00923	.14057	-.04952	.35923	.03522
VAR52	.03581	.00923	.14057	-.04952	.35923	.03522
VAR53	.03581	.00923	.14057	-.04952	.35923	.03522
VAR54	.03581	.00923	.14057	-.04952	.35923	.03522
VAR55	.03581	.00923	.14057	-.04952	.35923	.03522
VAR56	.03581	.00923	.14057	-.04952	.35923	.03522
VAR57	.03581	.00923	.14057	-.04952	.35923	.03522
VAR58	.03581	.00923	.14057	-.04952	.35923	.03522
VAR59	.03581	.00923	.14057	-.04952	.35923	.03522
VAR60	.03581	.00923	.14057	-.04952	.35923	.03522
VAR61	.03581	.00923	.14057	-.04952	.35923	.03522
VAR62	.03581	.00923	.14057	-.04952	.35923	.03522
VAR63	.03581	.00923	.14057	-.04952	.35923	.03522
VAR64	.03581	.00923	.14057	-.04952	.35923	.03522
VAR65	.03581	.00923	.14057	-.04952	.35923	.03522
VAR66	.03581	.00923	.14057	-.04952	.35923	.03522
VAR67	.03581	.00923	.14057	-.04952	.35923	.03522
VAR68	.03581	.00923	.14057	-.04952	.35923	.03522
VAR69	.03581	.00923	.14057	-.04952	.35923	.03522
VAR70	.03581	.00923	.14057	-.04952	.35923	.03522
VAR71	.03581	.00923	.14057	-.04952	.35923	.03522
VAR72	.03581	.00923	.14057	-.04952	.35923	.03522
VAR73	.03581	.00923	.14057	-.04952	.35923	.03522
VAR74	.03581	.00923	.14057	-.04952	.35923	.03522
VAR75	.03581	.00923	.14057	-.04952	.35923	.03522
VAR76	.03581	.00923	.14057	-.04952	.35923	.03522
VAR77	.03581	.00923	.14057	-.04952	.35923	.03522
VAR78	.03581	.00923	.14057	-.04952	.35923	.03522
VAR79	.03581	.00923	.14057	-.04952	.35923	.03522
VAR80	.03581	.00923	.14057	-.04952	.35923	.03522
VAR81	.03581	.00923	.14057	-.04952	.35923	.03522
VAR82	.03581	.00923	.14057	-.04952	.35923	.03522
VAR83	.03581	.00923	.14057	-.04952	.35923	.03522
VAR84	.03581	.00923	.14057	-.04952	.35923	.03522

Factor two appears to reflect the extent to which the company commander feels that he or she is under pressure, and tends to include an interesting collection of items that are ramifications of that pressure. Items on this factor are:

- I am under a lot of pressure to see to it that the drill sergeants in my company do a good job of training the trainees (.67).
- I am under a lot of pressure to see to it that the drill sergeants in my company don't abuse the trainees (.70).
- I personally think it's important to try to praise the trainees just so they don't think they're losers (.64).
- Drill sergeants seem to have more trouble understanding how to deal with trainees of the opposite sex than with trainees of their own sex (.63).
- Why a trainee joins the Army makes a difference in how effectively the drill sergeant can train them (.44).
- I think the Army is on track and I plan on staying in the Army for at least 20 years (-.49).

Factor three deals with current restrictions on "leaning on" or threatening the trainees, again with certain implications. Items here are:

- In order to produce a good soldier, the drill sergeant must often violate existing policies (.72).
- Drill sergeants have to swear at the trainees or scare them in order to control what they do (.73).
- A lot of trainees can't be made to do what is necessary unless the drill sergeant acts like he is going to get physical with them (.69).
- If a trainee is to learn to be a good soldier, he must experience a lot of physical and mental stress during basic training (.48).
- It's necessary to lean hard on new trainees until they begin to think less independently (.47).
- Quite a number of trainees are sent to some helping agency on post every cycle (.42).

- Trainees can be motivated to do a better job through the use of push-ups and extra running (.42).

Factor four appears to be a global evaluation of the quality of training and support for training in the unit. Items here are:

- Drill sergeants are given enough time during the cycle to teach the trainees how to "soldier" (.64).
- Drill sergeants get good support from the leadership at the battalion level (.63).
- Female trainees will eventually make as good soldiers as male trainees (.42).
- I am satisfied that on graduation day, we turn out trainees who are fully prepared for either advanced training or for duty positions in field units (.51).
- Drill sergeants get good support from all of the cadre in this unit (.40).
- A drill sergeant can't learn how to motivate today's trainees from books or by sitting in some classroom for several days or weeks (-.44).

Factor five appears to be a general evaluation of the quality of the drill sergeants themselves, along with several items which, in effect, contrast them with the quality of the trainees. Items loading on this factor were:

- I sometimes get the feeling that about the only kinds of people volunteering for the Army nowadays are those who have been rejected everywhere else (-.56).
- I am satisfied that on graduation day, we turn out trainees who are fully prepared for either advanced training or for duties in field units (.48).
- Within a few weeks, most of the trainees handle self-discipline really well (.51).
- In this unit counseling trainees is considered to be an extremely important part of training (.51).
- Stereotypes about how badly the drill sergeants treat the trainees are often true (-.54).

- Drill sergeants are seen as important in a very positive sense in this unit (.58).
- All in all, drill sergeants in this unit do a fine job (.57).

Factor six deals with the extent to which rules must be bent in order to satisfy the requirements. Items loading on this factor were:

- This unit sometimes bends the rules to let trainees graduate who actually did not meet the prescribed standards on performance tests (.53).
- Our unit permits male trainees to graduate even when they have failed to perform to standards on performance tests (-.67).
- Our unit permits female trainees to graduate even when they have failed to perform to standards on performance tests (-.62).
- There is enough time in the training cycle to allow trainees to practice new skills until they have mastered them (-.42).
- The only effective way for a drill sergeant to learn to deal with trainees is for the drill sergeant to get right down and do it and learn from his mistakes (.47).
- Drill sergeants who volunteer to be drill sergeants make better trainers than those who do not volunteer (.44).
- I wish the trainees were of the same quality they were in the days of the draft (.41).

It is interesting to note that with just a couple of exceptions, the only items to cross load are those dealing with quality of trainees currently entering the Army. This tendency clearly reflects a generalized belief that this aspect of the training situation pervades nearly everything that happens in the unit.

Descriptions of the Battalion Commander

As with most of the analyses for the company commander questionnaire and the first sergeant questionnaire, this set of analyses involves a fairly large number of items with a fairly small number of observations.

Specifically, there are 77 cases with 48 items. Therefore, as mentioned in each of the other analyses, caution must be exercised in generalizing the stability of the factor structures. In particular, the size of the loadings is likely to vary substantially, and marginal items are likely to enter or disappear with replication of the data set. On the other hand, for the same reasons described earlier, we feel fairly confident that the meaningfulness of the factor structure selected will substantially replicate, even if not completely so. Once again, a six factor solution was chosen, in this particular case because the factors were relatively easy to interpret and lent themselves to a meaningful understanding of the situation as the company commander perceived it. Replications of the factor structure in subsequent waves will be necessary in order to justify the choice of this relatively complex factor solution.

As has been the case with other questionnaires, *factor one* describing an individual tends to be rather large and global, accounting for a substantial proportion of the variance. This phenomenon is undoubtedly related to the strong evaluative component involved in the description of a peer or a supervisor. In the present case, *factor one* accounted for 33 percent of the variance. *Factor two* accounted for only 6.7 percent of the variance. Subsequent factors accounted for slowly declining amounts of variance. The complete factor solution is presented in Table 4.

As indicated above, *factor one* was a global, evaluative judgment of the quality of the battalion commander's leadership skills. Items which appeared on this factor with loadings above .5 are:

- When we receive a new requirement or mission, the battalion commander makes sure we understand the reason for it (.54).
- My battalion commander comes down and tries to do a subordinate's job, even when the subordinate is performing well (-.51).
- When there is a serious problem in the unit, our battalion commander involves his cadre in finding the solution by holding a group problem solving session (.65).

TABLE 4

COMPANY COMMANDER QUESTIONNAIRE: VARIMAX ROTATED FACTOR MATRIX OF BATTALION COMMANDER ITEMS

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6
VAR462	.33530	.12776	-.06613	.49303	.18815	-.18563
VAR443	-.11425	.17106	.36813	-.32768	.11208	-.03674
VAR445	.37663	-.37473	-.00165	-.01394	.54489	-.15601
VAR467	.64742	.37811	-.46224	.03839	.18002	-.23193
VAR448	.64713	.04683	-.02232	.07470	.05763	-.01354
VAR450	.60753	.38182	-.06101	.07014	.10329	.09038
VAR451	.66398	-.04847	-.34338	.11773	.18399	.09993
VAR452	.20505	.13375	-.20938	.39282	.12099	.02634
VAR453	.23045	.12933	-.02829	.14358	.07380	.03470
VAR454	.90437	.10086	.73771	-.06463	-.09994	.04907
VAR455	.10137	.06383	-.09770	.12239	.09801	.10830
VAR456	.14371	.03193	.00518	.24363	.08677	.02180
VAR457	.12654	.60628	-.03626	.28350	.04182	.09477
VAR460	.12680	.33600	-.03740	.01690	.09313	.07106
VAR461	.33586	.01290	-.15392	.68406	.07319	.13937
VAR462	.36913	.13850	-.37346	.42074	.63345	.18407
VAR463	.06933	.26777	.37333	-.22561	.01120	.13376
VAR464	.29781	.04693	-.07060	.62581	.28483	.20136
VAR465	.15720	.08210	.18270	.32221	.60193	.02262
VAR466	.15720	.37305	.62003	.29282	.60193	.03129
VAR467	.15720	.37305	.62003	.29282	.60193	.03129
VAR468	.15720	.37305	.62003	.29282	.60193	.03129
VAR469	.15720	.37305	.62003	.29282	.60193	.03129
VAR470	.15720	.37305	.62003	.29282	.60193	.03129
VAR471	.15720	.37305	.62003	.29282	.60193	.03129
VAR472	.15720	.37305	.62003	.29282	.60193	.03129
VAR473	.15720	.37305	.62003	.29282	.60193	.03129
VAR474	.15720	.37305	.62003	.29282	.60193	.03129
VAR475	.15720	.37305	.62003	.29282	.60193	.03129
VAR476	.15720	.37305	.62003	.29282	.60193	.03129
VAR477	.15720	.37305	.62003	.29282	.60193	.03129
VAR478	.15720	.37305	.62003	.29282	.60193	.03129
VAR479	.15720	.37305	.62003	.29282	.60193	.03129
VAR480	.15720	.37305	.62003	.29282	.60193	.03129
VAR481	.15720	.37305	.62003	.29282	.60193	.03129
VAR482	.15720	.37305	.62003	.29282	.60193	.03129
VAR483	.15720	.37305	.62003	.29282	.60193	.03129
VAR484	.15720	.37305	.62003	.29282	.60193	.03129
VAR485	.15720	.37305	.62003	.29282	.60193	.03129
VAR486	.15720	.37305	.62003	.29282	.60193	.03129
VAR487	.15720	.37305	.62003	.29282	.60193	.03129
VAR488	.15720	.37305	.62003	.29282	.60193	.03129
VAR489	.15720	.37305	.62003	.29282	.60193	.03129
VAR490	.15720	.37305	.62003	.29282	.60193	.03129
VAR491	.15720	.37305	.62003	.29282	.60193	.03129
VAR492	.15720	.37305	.62003	.29282	.60193	.03129
VAR493	.15720	.37305	.62003	.29282	.60193	.03129
VAR494	.15720	.37305	.62003	.29282	.60193	.03129

- The battalion commander quickly detects differences among his people which need to be settled (.61).
- Even when he disagrees, the battalion commander keeps an open mind and listens to what others have to say (.66).
- My battalion commander encourages me when I want to try something new (.68).
- The battalion commander evaluates his subordinates based on their performance, not on their personality or other factors (.71).
- When a subordinate performs a task well, the battalion commander lets him know about it (.66).
- Before the battalion commander punishes someone, he makes sure he knows all the facts - the whole story (.62).
- When I perform well, my battalion commander recognizes it with praise or a reward that means something to me (.74).
- The battalion commander doesn't let me do the things I was trained to do (-.52).
- The battalion commander sees that I get guidance which allows me to do my tasks and takes care of my responsibilities properly (.63).
- I feel confident that my battalion commander will back me up when I make decisions (.77).
- The battalion commander tries to run my company (-.59).
- My input is asked before decisions that affect me are made (.70).
- The battalion commander ensures that decisions are made at the level where the most accurate and most relevant information is to be found (.64).
- The battalion commander knows enough about my job to identify when I perform poorly (.55).
- The battalion commander acts as if he doesn't trust my judgment (.57).
- I believe the battalion commander when he says it is okay and safe to pass information up to him, whether the information is good or bad (-.56).

Factor two deals with the ability of the battalion commander to use his own judgment and to follow through once having made a decision. Items here are:

- When something critical must be done by a member of this unit, the battalion commander checks to make sure it is done properly (.72).
- When the battalion commander warns a subordinate about something, he follows through with punishment, if the subordinate's performance does not improve (.61).
- My battalion commander exercises his own judgment and makes decisions in areas in which he has the freedom to do so (.56).

Factor three deals with the punitiveness of the battalion commander, particularly with respect to the clarity of the standards set by the commander. Items loading here are:

- When a subordinate does something wrong or performs a task poorly, the battalion commander personally lets him know about it (.74).
- During counseling sessions, the battalion commander orders, threatens, criticizes or preaches (.62).
- Because of the battalion commander's attitude, I avoid letting him know when things aren't going the way he expects them to (.63).
- The battalion commander doesn't let me do the things I was trained to do (.49).
- When the battalion commander establishes standards, they are reasonable--just about everyone thinks they can meet all the standards if they work at it (.45).
- I believe the battalion commander when he says it is okay and safe to pass information up to him, whether the information is good or bad (.49).

Factor four appears to be a general consideration factor, with a heavy component involving positive feedback. Items loading on this factor were:

- When a subordinate performs a task well, the battalion commander lets him know about it (.52).
- When the battalion commander promises a reward, he follows through (.75).
- The battalion commander is courteous when dealing with his subordinates (.62).
- When someone in the unit wants to talk to him, the battalion commander manages to make himself available (.68).
- The battalion commander meets or exceeds all Army standards for personal appearance (.68).
- The battalion commander tries to run my company (-.51).
- Whenever the battalion commander refers someone to a helping agency, he follows up by checking to see that the agency did some good (.53).
- The battalion commander acts as if he doesn't trust my judgment (.44).
- The battalion commander lets a person who is being counseled do most of the talking (.41).
- When we receive a new requirement or mission, the battalion commander makes sure we understand the reason for it (.41).

Factor five deals with the clarity of the goals and standards set by the battalion commander. Items loading here are:

- The battalion commander gives orders that do not violate legal policies, SOP, regulations, or the UCMJ (.54).
- The battalion commander made it clear from the beginning how well we were required to perform each task (-.52).
- The battalion commander clearly defines the goals and priorities of this unit (-.50).
- The battalion commander does not punish a subordinate for poor performance unless there is a reason to believe that the subordinate is no longer trying to perform well (.46).

- When a subordinate asks the battalion commander for help solving a problem, he helps out (.40).
- When members of the cadre in this unit receive OERs, there are no surprises--performance is described in the same manner in which it had already been described during previous conversations (.49).
- When the battalion commander is told about a touchy or embarrassing problem, he tries to side-step the issue instead of facing it head-on (-.46).
- The battalion commander lets a person who is being counseled do most of the talking (-.47).

Factor six consists almost entirely of the two items dealing with mixed sex training. The items are:

- The battalion commander demands that we take into account physical differences between the male and female trainees when we conduct training (.85).
- The battalion commander acts quickly against members of the cadre who fraternize with trainees of the opposite sex (.78).

The product moment correlation between these two items was $r = .47$.

CHAPTER 3

FIRST SERGEANT QUESTIONNAIRE

There were three topic areas incorporated into the first sergeant questionnaire: descriptions of the company commander; the battalion Command Sergeant Major; plus a set of general climate and perceptual items. Means and standard deviations for each set are presented in Tables 5, 6, and 7.

Company Commander

The factor analysis of the first sergeant questionnaire items describing the company commander are based on an n of 82. Since there are 44 items categorized as company commander descriptors, the small n violates the rule of thumb that at least five observations per item are required to be reasonably confident of the stability of the factor structure. Thus, the results of the factor analysis described here should be interpreted with caution. Our approach to living with this problem was to give preference to a simple rather than complex rotated factor solution. That is, we chose to live with a relatively small number of factors rather than to take a chance that the additional factors might be highly unstable, particularly since they typically involved only two or three items. The tendency for a lot of cross-loading to occur, plus items loading together in a non-obvious way, helped to push us toward the position of taking a relatively small number of factors as adequate. This situation is in direct contrast to that encountered in the Company Commander Questionnaire, where factors emerged in a rather clean, clear manner.

The two-factor rotated solution was selected as the most meaningful for this data set. Although several of the more complex factor solutions appeared to be trying to reflect a dimensionality discovered in the descriptions of leaders in other questionnaire sets, the messiness of the cross-loadings and the tendency for superficially unrelated items to load together caused us to finally decide that it was inappropriate to attempt to impose that particular structure onto the data. Thus,

TABLE 5

FIRST SERGEANT QUESTIONNAIRE: GENERAL ITEMS

VARIABLE	MEAN	STANDARD DEV	CASES
VAR1	4.0118	1.1902	85
VAR2	4.1882	1.1700	85
VAR3	4.3922	1.2277	85
VAR4	4.3376	1.2253	85
VAR5	4.0471	1.2444	85
VAR6	4.2333	1.2502	85
VAR7	4.1050	1.2349	85
VAR8	4.7176	1.1833	85
VAR9	4.6706	1.2407	85
VAR10	4.9529	1.2809	85
VAR11	4.7882	1.2733	85
VAR12	4.9176	1.3507	85
VAR13	4.0941	1.3519	85
VAR14	4.2471	1.3677	85
VAR15	4.3765	1.3677	85
VAR16	4.5926	1.3809	85
VAR17	4.0055	1.2837	85
VAR18	4.6824	1.2837	85
VAR19	4.6477	1.2803	85
VAR20	4.6466	1.2667	85
VAR21	4.1122	1.0007	85
VAR22	4.4933	1.7661	85
VAR23	4.8674	1.2766	85
VAR24	4.5820	1.2533	85
VAR25	4.5820	1.2533	85
VAR26	4.5820	1.2533	85
VAR27	4.6677	1.2533	85
VAR28	4.6118	1.2533	85
VAR29	4.0941	1.1915	85
VAR30	4.5529	1.3509	85
VAR31	4.6000	1.4700	85
VAR32	4.6822	1.7488	85
VAR33	4.9412	1.3376	85
VAR34	4.6233	1.3501	85
VAR35	4.6233	1.3501	85
VAR36	4.6233	1.3501	85
VAR37	4.6233	1.3501	85
VAR38	4.6233	1.3501	85
VAR39	4.6233	1.3501	85
VAR40	4.6233	1.3501	85
VAR41	4.6233	1.3501	85
VAR42	4.6233	1.3501	85
VAR43	4.6233	1.3501	85
VAR44	4.6233	1.3501	85
VAR45	4.6233	1.3501	85
VAR46	4.6233	1.3501	85
VAR47	4.6233	1.3501	85
VAR48	4.6233	1.3501	85
VAR49	4.6233	1.3501	85
VAR50	4.6233	1.3501	85
VAR51	4.6233	1.3501	85
VAR52	4.6233	1.3501	85
VAR53	4.6233	1.3501	85
VAR54	4.6233	1.3501	85
VAR55	4.6233	1.3501	85
VAR56	4.6233	1.3501	85
VAR57	4.6233	1.3501	85
VAR58	4.6233	1.3501	85
VAR59	4.6233	1.3501	85
VAR60	4.6233	1.3501	85
VAR61	4.6233	1.3501	85
VAR62	4.6233	1.3501	85
VAR63	4.6233	1.3501	85
VAR64	4.6233	1.3501	85
VAR65	4.6233	1.3501	85
VAR66	4.6233	1.3501	85
VAR67	4.6233	1.3501	85
VAR68	4.6233	1.3501	85
VAR69	4.6233	1.3501	85
VAR70	4.6233	1.3501	85
VAR71	4.6233	1.3501	85
VAR72	4.6233	1.3501	85
VAR73	4.6233	1.3501	85
VAR74	4.6233	1.3501	85
VAR75	4.6233	1.3501	85

TABLE 6

FIRST SERGEANT QUESTIONNAIRE:
COMPANY COMMANDER ITEMS

VARIABLE	MEAN	STANDARD DEV	CASES
VAR42	4.7927	.5384	82
VAR43	4.6463	.8660	82
VAR44	4.4220	1.0109	82
VAR45	4.2719	1.6103	82
VAR46	4.0000	1.8784	82
VAR47	3.7463	1.1013	82
VAR48	3.5195	1.0660	82
VAR49	3.2109	.9687	82
VAR50	2.8049	1.0823	82
VAR51	2.4805	1.0773	82
VAR52	2.1955	1.8927	82
VAR53	1.9732	1.0065	82
VAR54	1.7244	.9293	82
VAR55	1.4651	.8705	82
VAR56	1.2512	.9316	82
VAR57	1.0317	.8061	82
VAR58	.8195	.6846	82
VAR59	.6268	.6458	82
VAR61	.5366	.5516	82
VAR62	.4268	.4533	82
VAR63	.3414	.3900	82
VAR64	.2536	.2835	82
VAR65	.1533	.1954	82
VAR66	.0539	.1288	82
VAR67	-.0366	1.1661	82
VAR68	-.1329	.8323	82
VAR69	-.2268	.5676	82
VAR70	-.3256	1.4088	82
VAR71	-.4198	1.1200	82
VAR72	-.5195	1.4964	82
VAR73	-.6174	1.0635	82
VAR76	-.8780	1.6879	82
VAR77	-.9490	1.1557	82
VAR78	-.7561	1.1818	82
VAR79	-.5488	.8337	82
VAR80	-.3129	.8050	82
VAR81	-.1436	.6497	82
VAR86	.3707	1.3470	82
VAR87	.7073	1.3193	82
VAR88	.9902	1.0154	82
VAR89	.9976	1.4896	82
VAR90	.4256	1.0038	82
VAR91	.4878	.8783	82
VAR92	.4268	.9167	82

TABLE 7

FIRST SERGEANT QUESTIONNAIRE:
COMMAND SERGEANT MAJOR ITEMS

VARIABLE	MEAN	STANDARD DEV	CASES
VAR94	2.2857	1.0676	91
VAR95	4.4835	.8739	91
VAR96	2.7143	1.2848	91
VAR97	2.8242	1.1794	91
VAR98	2.4396	1.1076	91
VAR99	1.8242	.9261	91
VAR100	1.5495	.7925	91
VAR101	2.6154	1.0622	91
VAR102	1.7582	.9926	91
VAR103	2.4945	1.0580	91
VAR104	4.2418	1.0780	91
VAR105	1.8132	.9765	91
VAR106	1.6484	.8991	91
VAR107	3.8132	1.2010	91
VAR108	1.5275	.8862	91
VAR109	1.6044	.8939	91
VAR110	2.1319	1.0674	91
VAR111	1.4725	.8211	91
VAR112	3.7253	1.0896	91
VAR113	3.5165	1.5082	91
VAR114	4.1868	1.0426	91
VAR115	1.9451	1.1866	91
VAR116	3.8462	1.2554	91
VAR117	4.2637	1.1531	91

we have chosen two factors, *factor one* being a global, overall evaluation of the leader's style, and *factor two* apparently dealing with open communication between the leader and subordinates. Each of the factors will be described in terms of the three or four top loading items, with a complete description of the factor loadings presented in Table 8.

Factor one, the leadership quality dimension, was defined primarily by the following items:

- When the company commander promises a reward, he follows through (.71).
- When a subordinate asks the company commander for help solving a problem, he helps out (.73).
- When a subordinate performs well, the company commander lets him know about it (.73).
- When someone in the unit wants to talk to him, the company commander manages to make himself available (.68).
- Before the company commander punishes someone, he makes sure he knows all the facts (.69).

Notice that of the three qualities of leadership that tended to appear in other factor structures (consideration, mutual trust, and leadership effectiveness), this factor appears to be mostly allied with the consideration dimension, with a heavy emphasis on proper recognition of performance and sensitivity to the needs of the soldiers.

Factor two appears to deal fairly directly with various aspects of communication between the commander and his subordinates. The highest loading items on this factor were:

- The company commander sees that I get guidance which allows me to do my tasks and take care of my responsibilities properly (.79).
- My input is asked before decisions that affect me are made (.73).
- My company commander encourages me when I want to try something new (.69).
- When I perform well, my company commander recognizes it with praise or a reward that means something to me (.63).

TABLE 8

FIRST SERGEANT QUESTIONNAIRE:
VARIMAX ROTATED FACTOR MATRIX OF COMPANY COMMANDER ITEMS

	FACTOR 1	FACTOR 2
VAR42	-.17092	-.41901
VAR43	-.00264	-.40546
VAR44	-.01471	-.42188
VAR45	-.01656	-.43551
VAR46	-.03437	-.43385
VAR47	-.04519	-.42622
VAR48	-.05786	-.43310
VAR49	-.06925	-.42643
VAR50	-.05550	-.40505
VAR51	-.07000	-.40896
VAR52	-.09177	-.40194
VAR53	-.09610	-.41845
VAR54	-.09488	-.41845
VAR55	-.09200	-.41726
VAR56	-.09000	-.41726
VAR57	-.09211	-.41726
VAR58	-.09000	-.41726
VAR59	-.09000	-.41726
VAR61	-.09000	-.41726
VAR62	-.09000	-.41726
VAR63	-.09000	-.41726
VAR64	-.09000	-.41726
VAR65	-.09000	-.41726
VAR66	-.09000	-.41726
VAR67	-.09000	-.41726
VAR68	-.09000	-.41726
VAR69	-.09000	-.41726
VAR70	-.09000	-.41726
VAR71	-.09000	-.41726
VAR72	-.09000	-.41726
VAR73	-.09000	-.41726
VAR76	-.09000	-.41726
VAR77	-.09000	-.41726
VAR78	-.09000	-.41726
VAR79	-.09000	-.41726
VAR80	-.09000	-.41726
VAR81	-.09000	-.41726
VAR86	-.09000	-.41726
VAR87	-.09000	-.41726
VAR88	-.09000	-.41726
VAR89	-.09000	-.41726
VAR90	-.09000	-.41726
VAR91	-.09000	-.41726
VAR92	-.09000	-.41726

Although we have chosen to call this a communication factor, notice again that in common with *factor one*, rewarding and encouragement are a major component.

Descriptions of Command Sergeant Major

There were 24 items specifically addressed at the Command Sergeant Major. The factor analyses of these items involved an n of 91. Therefore, although again still somewhat below the minimum requirement of five observations per item, the sample size relative to the item set size is approaching a minimally acceptable level. Nevertheless, being so close to the minimum, again we must exercise caution in assuming that the factor structures would remain stable over time. Given the constraints and cautions we have expressed, the five-factor rotated solution was chosen as the most useful, as is shown in Table 9.

Factor one appears to be a general qualitative judgment of the Command Sergeant Major symbolized by the highest loading item:

- The Command Sergeant Major meets or exceeds all Army standards for personal appearance (.75).

Other items loading on this factor were:

- When an NCO performs a task well, the Command Sergeant Major lets him know about it (.56).
- My Command Sergeant Major performs tasks that are absolutely essential to the training session (.46).
- When we are not too sure how the Command Sergeant Major wants a task performed, he spends time explaining and showing us how he wants it done (.60).
- When I first arrived in my present assignment, the Command Sergeant Major made sure that I received training and other assistance to perform tasks which I was not already familiar with (-.57).
- When the Command Sergeant Major establishes standards, they are reasonable--just about everyone thinks they can meet all the standards if they work at it (-.52).

Factor two appears to be a trust and openness factor. The two highest loading items were:

TABLE 9
FIRST SERGEANT QUESTIONNAIRE: VARIMAX ROTATED FACTOR MATRIX OF COMMAND SERGEANT MAJOR ITEMS

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5
VAR94	.24757	.10208	.39092	.47114	.54825
VAR95	-.01974	-.70396	-.02345	-.15551	-.01169
VAR96	-.10529	.13270	.10888	.06708	.85024
VAR97	.30538	-.24904	.13022	.06940	.09639
VAR98	.56085	.17427	.30515	.34942	.54266
VAR99	.32759	.47139	.67172	.03296	-.01526
VAR100	.12376	.27810	.77260	.08506	.23269
VAR101	.02111	.64030	.38340	-.06668	.12529
VAR102	.11916	.12047	.72882	.14217	.12101
VAR103	.46484	.28426	.28517	.40845	.08794
VAR104	-.06981	-.02252	-.64690	.36186	-.05688
VAR105	.29360	.15921	.68661	.31384	.19460
VAR106	.23183	.25254	.78860	.25070	.16681
VAR107	-.28455	-.60391	.36798	.13093	.21827
VAR108	.74834	.01647	.32728	.05925	.07606
VAR109	.44659	.04400	.62161	.12085	.38829
VAR110	.59848	.12487	.46827	.11407	.19577
VAR111	.21577	.05927	.65270	.14808	.05299
VAR112	.34739	.39103	.55168	.06848	.08139
VAR113	.57458	-.42279	.00430	.21134	-.16958
VAR114	-.52162	-.36637	.29949	.26751	-.10186
VAR115	.32772	.66432	.17376	.20132	.03032
VAR116	-.24859	.00281	.28645	-.69490	-.23972
VAR117	.07385	-.20925	-.20409	-.83066	-.00279

- The Command Sergeant Major lets a person being counseled do most of the talking (.64).
- During counseling sessions, the Command Sergeant Major orders, threatens, criticizes or preaches (-.60).
- The Command Sergeant Major is courteous when dealing with his NCOs and privates in my unit (.47).
- When I first arrived in my present assignment, the Command Sergeant Major made sure that I received training and other assistance in performing tasks which I was not already familiar with (-.42).

Although the first two factors appeared to have a heavy consideration component, *factor three* was defined as being primarily a consideration factor. Highest loading items here were:

- When an NCO asks the Command Sergeant Major for help with a problem, he helps out (.79).
- When someone in the unit wants to talk to the Command Sergeant Major, he makes himself available (.77).
- When the Command Sergeant Major determines that an NCO has a serious problem, he refers him to a helping agency (.73).
- The Command Sergeant Major is courteous when dealing with his NCOs and privates in my unit (.67).
- When the Command Sergeant Major is told about a touchy or embarrassing problem, he tries to sidestep the issue instead of facing it head-on (-.65).
- Whenever the Command Sergeant Major refers any NCO to a helping agency, he follows up by checking to see that the agency did some good (.69).
- During counseling sessions, the Command Sergeant Major orders, threatens, criticizes or preaches (-.47).
- My Command Sergeant Major keeps me informed about what tasks he expects me to perform (.62).
- My Command Sergeant Major demands as much from his female NCOs as he does from his male NCOs (.65).
- Whenever the Command Sergeant Major has to chew out an NCO, he does it in private (.55).

Factor four appears to relate to the extent to which the Command Sergeant Major has adequate job knowledge in dealing with NCOs. Items loading here were:

- The Command Sergeant Major made it clear from the beginning how well I was required to perform each task--what his standards were (-.69).
- When we receive a new requirement or mission, the Command Sergeant Major makes sure we understand the reason for it (.47).
- My Command Sergeant Major performs tasks that are absolutely essential to the training session (.41).

Factor five deals with feedback. Items loading here are:

- When something critical must be done by a member of this unit, the Command Sergeant Major checks to make sure it is done properly (.85).
- When an NCO does something wrong or performs a task poorly, the Command Sergeant Major personally let him know about it (.70).
- When we receive a new requirement or mission, the Command Sergeant Major makes sure we understand the reason for it (.55).

In this instance, feedback appears to be related to the extent to which the Command Sergeant Major provides feedback about how and why a job is being performed, as well as making sure that he gets the necessary feedback to make such an evaluation.

General Items

The factor analysis of the general item set filled out by the first sergeants involved 45 items based on an n of 85. Since this ratio did not satisfy the rule of thumb for five observations per item, the factor structure selected must be interpreted with caution, and our approach is to select a structure involving a relatively few factors. In this case, the three factor rotated solution was deemed to be meaningful. The complete rotated solution is presented in Table 10.

TABLE 10

FIRST SERGEANT QUESTIONNAIRE:
VARIMAX ROTATED FACTOR MATRIX OF GENERAL ITEMS

	FACTOR 1	FACTOR 2	FACTOR 3
VAR1	.57760	.08933	.22732
VAR2	-.10867	.47266	.13386
VAR3	-.23589	.14447	.02506
VAR4	-.23980	.09615	-.01729
VAR5	-.31387	.06686	.27632
VAR6	-.31982	.11945	.40257
VAR7	-.33547	.11659	.46610
VAR8	-.59166	.03047	.08450
VAR9	-.47388	.24756	.23829
VAR10	.00611	.02869	.17318
VAR11	-.04253	.02088	.33311
VAR12	-.06225	.03307	.08104
VAR13	-.06508	.03127	.09035
VAR14	-.24046	.12761	.08111
VAR15	-.10241	.13376	.08111
VAR16	-.11922	.13056	.09641
VAR17	-.17249	.17673	.14036
VAR18	-.03391	.33067	.15912
VAR19	-.05021	.30025	.16222
VAR20	-.26668	.05146	.04554
VAR21	-.16099	.06335	.17345
VAR22	-.00092	.00033	.00011
VAR23	-.03348	.00064	.00097
VAR24	-.06222	.00025	.00078
VAR25	-.02611	.02350	.06711
VAR26	-.02730	.17788	.17223
VAR27	-.03633	.13377	.11111
VAR28	-.05067	.06663	.10554
VAR29	-.07280	.02462	.12028
VAR30	-.04699	.22106	.37530
VAR31	-.04963	.06291	.13296
VAR32	-.14884	.06250	.07225
VAR33	-.33077	.02857	.06404
VAR34	-.04401	.01274	.11017
VAR35	-.06453	.11567	.03690
VAR36	-.02554	.48091	.05665
VAR37	-.01761	.13408	.14516
VAR38	-.04886	.24349	.10484
VAR39	-.06920	.00168	.00007
VAR40	-.04794	.00497	.04836
VAR41	-.33241	.06586	.01829
VAR42	-.34999	.27669	.09407
VAR43	-.23275	.18943	.40735
VAR44	-.19951	.29048	.50808
VAR45	-.00453	.36000	.06474

Factor one involved general attitudes and perceptions about the new rules and restrictions regarding punishment and motivating trainees. Items loading on this factor were:

- If a trainee is to learn to be a good soldier, he must experience a lot of physical and mental stress during basic training (.58).
- It's necessary to lean hard on new trainees until they begin to think less independently (.52).
- In order to produce a good soldier, a drill sergeant must violate existing policies (.64).
- Drill sergeants have to swear at the trainees or scare them in order to control what they do (.59).
- I am satisfied that on graduation day we turn out trainees that are fully prepared (-.47).
- This unit sometimes bends the rules to let trainees graduate who actually did not meet the prescribed standards on performance tests (.43).
- Drill sergeants can get a lot more out of the trainees by threatening to punish them than by trying to counsel them (.69).
- A lot of trainees cannot be made to do what is necessary unless the drill sergeant acts like he is going to get physical with them (.65).
- Trainees can be motivated to do a better job through the use of pushups and extra running (.46).
- Our unit permits male trainees to graduate even when they have failed to perform to standards on performance tests (-.69).
- Our unit permits female trainees to graduate even when they have failed to perform to standards on performance tests (-.55).

Factor two deals with perceived quality of command support for the drill sergeants. Items on this factor are:

- Suggestions made by drill sergeants for improving performance in their unit are often implemented by their superiors or by their cadre (.73).

- Drill sergeants get good support from all of the cadre in their unit (.67).
- Drill sergeants get good support from the leadership at the battalion level (.51).
- Drill sergeants are seen as important in a very positive sense in this unit (.67).
- Why a trainee joins the Army makes a difference in how effectively the drill sergeants can train them (.60).
- All in all, the drill sergeants in this unit do a fine job (.64).
- This unit encourages drill sergeants to try out the newer ideas that they bring with them out of drill sergeant school (.48).
- All in all, officers in this unit do a fine job (.47).

Factor three deals with the extent to which drill sergeants appear to be overworked and, interestingly, includes items about abuse.

Factors loading here are:

- Drill sergeants are given enough time during the cycle to teach the trainees how to "soldier" (.58).
- Trainees could do just as well with a lot less supervision than they get now (.61).
- Trainees in this unit are often abused by the drill sergeants (.62).
- Trainees in this unit are often abused by cadre who are not drill sergeants (.64).
- The drill sergeants have to work such long hours that the quality of their performance suffers (.51).
- There is enough time in the training cycle to allow trainees to practice new skills until they have mastered them (-.41).
- The most important duties a first sergeant has are administrative (.40).

It is not clear why this last item loaded on this particular factor, unless it is a reflection of a feeling that as drill sergeants

become more and more overworked, the first sergeant is more likely to be required to perform duties not normally expected of him. The presence of the abuse items, along with the "overwork" or "sufficient time" items strongly suggest a belief among first sergeants (whether or not they could or would state the connection directly), that trainee abuse is related to, perhaps even caused by, drill sergeant stress induced by overwork.

CHAPTER 4

DRILL SERGEANT QUESTIONNAIRE

The drill sergeants described their company commander and their first sergeant, as well as filling out a rather long list of general items. Thus, there are three item sets in the questionnaire, and their means and standard deviations are presented in Tables 11, 12, and 13. In all three item sets, the n well exceeds the rule-of-thumb minimum of five observations per item.

Descriptions of the Company Commander

The company commander was described on a set of 51 items distributed throughout the entire item set in the questionnaire. As usual, the first principal axis factor accounted for an overwhelmingly large amount of variance, 34.2%. The second factor accounted for only 4.1% of the variance, and subsequent factors accounted for similar but slowly declining amounts of variance. Thus, variance accounted for by the third through sixth factors were 3.7, 3.2, 2.8, and 2.5%. The six-factor solution was chosen as most meaningful, and is presented in Table 14.

Factor one was a general quality of leadership factor, and contained items dealing with the activity and knowledge of the company commander, as well as items on participative decision making, an open and encouraging attitude, and willingness to personally give feedback and guidance.

Items appearing on this factor with loadings above .50 are as follows:

- The company commander knows enough about my job to identify when I perform poorly (-.51).
- My company commander takes an active role in the leadership of this unit (-.55).
- The company commander made it clear from the beginning how well we were required to perform each task (-.58).

TABLE 11
 DRILL SERGEANT QUESTIONNAIRE:
 COMPANY COMMANDER ITEMS

VARIABLE	MEAN	STANDARD DEV	CASES
VAR11	2.670	1.1	60
VAR12	2.075	1.1	60
VAR13	2.000	1.1	60
VAR14	2.511	1.1	60
VAR19	2.261	1.1	60
VAR20	2.111	1.1	60
VAR28	2.333	1.1	60
VAR29	2.111	1.1	60
VAR30	2.777	1.1	60
VAR31	2.000	1.1	60
VAR32	2.111	1.1	60
VAR34	2.000	1.1	60
VAR35	2.222	1.1	60
VAR36	2.333	1.1	60
VAR37	2.333	1.1	60
VAR38	2.444	1.1	60
VAR39	2.222	1.1	60
VAR40	2.444	1.1	60
VAR41	2.555	1.1	60
VAR42	2.666	1.1	60
VAR43	2.777	1.1	60
VAR44	2.888	1.1	60
VAR45	2.999	1.1	60
VAR46	3.111	1.1	60
VAR47	3.222	1.1	60
VAR48	3.333	1.1	60
VAR49	3.444	1.1	60
VAR50	3.555	1.1	60
VAR51	3.666	1.1	60
VAR53	3.777	1.1	60
VAR54	3.888	1.1	60
VAR55	3.999	1.1	60
VAR56	4.111	1.1	60
VAR57	4.222	1.1	60
VAR58	4.333	1.1	60
VAR59	4.444	1.1	60
VAR60	4.555	1.1	60
VAR61	4.666	1.1	60
VAR62	4.777	1.1	60
VAR63	4.888	1.1	60
VAR64	4.999	1.1	60
VAR65	5.111	1.1	60
VAR66	5.222	1.1	60
VAR67	5.333	1.1	60
VAR68	5.444	1.1	60
VAR69	5.555	1.1	60
VAR70	5.666	1.1	60
VAR71	5.777	1.1	60
VAR72	5.888	1.1	60
VAR73	5.999	1.1	60
VAR74	6.111	1.1	60

TABLE 12
 DRILL SERGEANT QUESTIONNAIRE:
 FIRST SERGEANT ITEMS

VARIABLE	MEAN	STANDARD DEV	CASES
VAR129	4.0109	1.3318	642
VAR130	4.0089	1.3487	642
VAR131	4.0055	1.3622	642
VAR132	4.0071	1.3606	642
VAR133	4.0088	1.3703	642
VAR134	4.0033	1.3838	642
VAR135	4.0112	1.3533	642
VAR136	4.0171	1.3464	642
VAR137	4.0066	1.3818	642
VAR138	4.0036	1.3611	642
VAR139	4.0080	1.3600	642
VAR140	4.0078	1.3609	642
VAR141	4.0088	1.3605	642
VAR142	4.0080	1.3605	642
VAR143	4.0033	1.3605	642
VAR144	4.0099	1.3677	642
VAR145	4.0078	1.3688	642
VAR146	4.0055	1.3600	642
VAR147	4.0099	1.3600	642
VAR148	4.0033	1.3600	642
VAR149	4.0077	1.3666	642
VAR150	4.0086	1.3666	642
VAR151	4.0033	1.3666	642
VAR152	4.0033	1.3666	642
VAR153	4.0033	1.3666	642
VAR154	4.0033	1.3666	642
VAR155	4.0033	1.3666	642
VAR156	4.0033	1.3666	642
VAR157	4.0033	1.3666	642
VAR158	4.0033	1.3666	642
VAR159	4.0033	1.3666	642
VAR160	4.0033	1.3666	642

TABLE 13

DRILL SERGEANT QUESTIONNAIRE: GENERAL ITEMS

VARIABLE	MEAN	STANDARD DEV	CASES
VAR1	4.471		
VAR2	4.471		
VAR3	4.471		
VAR4	4.471		
VAR5	4.471		
VAR6	4.471		
VAR7	4.471		
VAR8	4.471		
VAR9	4.471		
VAR10	4.471		
VAR11	4.471		
VAR12	4.471		
VAR13	4.471		
VAR14	4.471		
VAR15	4.471		
VAR16	4.471		
VAR17	4.471		
VAR18	4.471		
VAR19	4.471		
VAR20	4.471		
VAR21	4.471		
VAR22	4.471		
VAR23	4.471		
VAR24	4.471		
VAR25	4.471		
VAR26	4.471		
VAR27	4.471		
VAR28	4.471		
VAR29	4.471		
VAR30	4.471		
VAR31	4.471		
VAR32	4.471		
VAR33	4.471		
VAR34	4.471		
VAR35	4.471		
VAR36	4.471		
VAR37	4.471		
VAR38	4.471		
VAR39	4.471		
VAR40	4.471		
VAR41	4.471		
VAR42	4.471		
VAR43	4.471		
VAR44	4.471		
VAR45	4.471		
VAR46	4.471		
VAR47	4.471		
VAR48	4.471		
VAR49	4.471		
VAR50	4.471		
VAR51	4.471		
VAR52	4.471		
VAR53	4.471		
VAR54	4.471		
VAR55	4.471		
VAR56	4.471		
VAR57	4.471		
VAR58	4.471		
VAR59	4.471		
VAR60	4.471		
VAR61	4.471		
VAR62	4.471		
VAR63	4.471		
VAR64	4.471		
VAR65	4.471		
VAR66	4.471		
VAR67	4.471		
VAR68	4.471		
VAR69	4.471		
VAR70	4.471		
VAR71	4.471		
VAR72	4.471		
VAR73	4.471		
VAR74	4.471		
VAR75	4.471		
VAR76	4.471		
VAR77	4.471		
VAR78	4.471		
VAR79	4.471		
VAR80	4.471		
VAR81	4.471		
VAR82	4.471		
VAR83	4.471		
VAR84	4.471		
VAR85	4.471		
VAR86	4.471		
VAR87	4.471		
VAR88	4.471		
VAR89	4.471		
VAR90	4.471		
VAR91	4.471		
VAR92	4.471		
VAR93	4.471		
VAR94	4.471		
VAR95	4.471		
VAR96	4.471		
VAR97	4.471		
VAR98	4.471		
VAR99	4.471		
VAR100	4.471		

TABLE 13 (CONTINUED)

DRILL SERGEANT QUESTIONNAIRE: GENERAL ITEMS

VAR1112	2.7106	1.0376	4.4225
VAR1113	2.7082	1.0345	4.4225
VAR1114	2.2706	1.0345	4.4225
VAR1115	2.8447	1.0345	4.4225
VAR1116	2.2376	1.0345	4.4225
VAR1117	2.1200	1.0345	4.4225
VAR1118	2.3459	1.0345	4.4225
VAR1119	2.6047	1.0345	4.4225
VAR1120	2.4659	1.0345	4.4225
VAR1121	2.8800	1.0345	4.4225
VAR1122	2.3741	1.0345	4.4225
VAR1223	2.8612	1.0345	4.4225
VAR1224	2.9788	1.0345	4.4225
VAR1225	2.8094	1.0345	4.4225
VAR1226	2.3741	1.0345	4.4225
VAR1227	1.8471	1.0345	4.4225
VAR1228	3.6094	1.0345	4.4225

TABLE 14

DRILL SERGEANT QUESTIONNAIRE: VARIMAX ROTATED FACTOR MATRIX OF COMPANY COMMANDER ITEMS

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6
VAR11	-.51039	-.06769	-.38441	.05185	-.16713	.20398
VAR12	-.35675	-.08597	-.03279	-.00153	-.15863	-.05904
VAR13	-.49521	-.08420	-.15485	-.26774	-.08838	-.18098
VAR14	-.45757	-.07591	-.04445	-.08774	-.11573	-.06446
VAR19	-.04624	-.26350	-.24103	-.00203	-.03677	-.72850
VAR20	-.54607	-.14599	-.53912	-.07389	-.02384	-.31375
VAR28	-.43290	-.15466	-.42260	-.10584	-.10458	-.18004
VAR30	-.58469	-.23142	-.22324	-.06746	-.07715	-.16066
VAR31	-.11002	-.04617	-.10745	-.13080	-.00050	-.71872
VAR32	-.12844	-.21152	-.33423	-.05784	-.15907	-.25261
VAR34	-.59944	-.28601	-.27254	-.08441	-.06176	-.04568
VAR35	-.67536	-.32136	-.25635	-.07537	-.00265	-.08946
VAR36	-.12892	-.21308	-.59474	-.16470	-.04903	-.08686
VAR37	-.01672	-.28048	-.02708	-.18361	-.15783	-.11232
VAR39	-.68812	-.22782	-.22020	-.10301	-.05160	-.06602
VAR40	-.62424	-.16188	-.20268	-.02291	-.10795	-.02866
VAR41	-.73007	-.17840	-.21373	-.03805	-.14678	-.07373
VAR42	-.73659	-.17620	-.47535	-.06334	-.07376	-.07408
VAR43	-.37034	-.30264	-.30946	-.06188	-.24657	-.00035
VAR44	-.61950	-.48666	-.19220	-.05091	-.18797	-.01116
VAR45	-.59229	-.36242	-.28835	-.03359	-.03988	-.01517
VAR46	-.52233	-.36952	-.17167	-.14252	-.10646	-.01522
VAR47	-.17653	-.32697	-.64719	-.02973	-.05654	-.02528
VAR49	-.32697	-.41611	-.35535	-.01875	-.12115	-.05591
VAR50	-.26341	-.59030	-.31448	-.07178	-.10496	-.00562
VAR51	-.26371	-.59066	-.33192	-.13011	-.10744	-.00562
VAR53	-.31519	-.60566	-.20737	-.11119	-.03798	-.08643
VAR55	-.05381	-.47248	-.46121	-.02074	-.26846	-.02785
VAR56	-.23999	-.47248	-.46121	-.01831	-.09121	-.03556
VAR57	-.38371	-.57308	-.18731	-.01831	-.17077	-.03876
VAR58	-.18276	-.08868	-.23442	-.11569	-.13471	-.03002
VAR59	-.15030	-.42982	-.66314	-.11707	-.44625	-.04233
VAR60	-.27987	-.19531	-.52555	-.00403	-.60898	-.01347
VAR61	-.15030	-.42982	-.66314	-.07014	-.01973	-.01500
VAR62	-.27987	-.19531	-.52555	-.18479	-.28948	-.16262
VAR63	-.33639	-.32165	-.20321	-.24045	-.24922	-.00436
VAR64	-.08939	-.33603	-.26945	-.04545	-.32845	-.01900
VAR66	-.30117	-.33603	-.33083	-.11346	-.21765	-.04637
VAR68	-.17228	-.30915	-.30953	-.13380	-.20936	-.00586
VAR69	-.03350	-.15302	-.10428	-.35144	-.27724	-.04638
VAR70	-.08757	-.29128	-.10770	-.62628	-.08112	-.06336
VAR71	-.52397	-.27156	-.34091	-.88139	-.06426	-.13197
VAR72	-.19244	-.51904	-.42223	-.30739	-.23864	-.08190
VAR73	-.19244	-.51904	-.42223	-.21264	-.10599	-.03648

- My company commander knows what is going on in this unit (.60).
- When we receive a new requirement or mission, the company commander makes sure we understand the reason for it (.68).
- When there is a serious problem in the unit, our company commander involves his cadre in finding the solution by holding a group problem-solving session (.62).
- When there is a question about responsibilities on various unit tasks, the company commander holds a meeting to lay out individual responsibilities (.73).
- The company commander quickly detects differences among his people which need to be settled (.74).
- Even when he disagrees, the company commander keeps an open mind and listens to what others have to say (.53).
- My company commander encourages me when I want to try something new (.57).
- The company commander evaluates his subordinates based on their performance, not on their personalities or other factors (.62).
- When a subordinate does something wrong or performs a task poorly, the company commander personally lets him know about it (.59).
- When a subordinate performs a task well, the company commander lets him know about it (.65).
- When I perform well, my company commander recognizes it with praise or a reward that means something to me (.54).
- The company commander sees that I get guidance which allows me to do my tasks and take care of my responsibilities properly (.56).
- The company commander ensures that decisions are made at the level where the most accurate and most relevant information is to be found (.52).
- When something critical must be done by a member of this unit, the company commander checks to make sure it is done properly (.62).

Items which loaded in the forties are as follows:

- The company commander clearly defines the goals and priorities of this unit (-.49).
- When I first arrived in my present assignment, the company commander made sure I received training and other assistance in performing tasks which I was not already familiar with (-.46).
- When the company commander establishes standards, they are reasonable--just about everyone thinks they can meet all the standards if they work at it (-.43).
- The company commander's punishments seem to be fair (-.43).
- The company commander makes sure that what we do in this unit is necessary to accomplish our training mission (.49).
- The company commander evaluates his subordinates based on their performance, not on their personalities or other factors (.43).
- I feel confident that my company commander will back me up when I make decisions (.48).
- My input is asked before decisions that effect me are made (.49).

In summary then, this factor represents a very strong evaluative judgment of the quality of the company commander's leadership. It is interesting to note that involvement of the drill sergeants in the policy and decision-making process is seen as extremely important, and is related to the extent to which the company commander knows what is going on in a unit and is actively performing his role as the commander. Providing information on how a task is to be done, why a task is being required, as well as personal feedback about performance of both a positive and negative nature are all seen as positive qualities of leadership.

Factor two is a consideration and sensitivity dimension, almost in the classic sense of consideration behavior. It includes the following items in order of descending loadings:

- When someone in the unit wants to talk to him, the company commander manages to make himself available (.67).

- Before the company commander punishes someone, he makes sure that he knows all the facts (.59).
- The company commander is courteous when dealing with his subordinates (.60).
- When a subordinate asks the company commander for help in solving a problem, he helps out (.58).
- When the company commander determines that a subordinate has a serious problem, he refers the subordinate to a helping agency (.57).
- Whenever the company commander refers someone to a helping agency, he follows up by checking to see that the agency did some good (.57).
- When the company commander promises a reward, he follows through (.56).
- The company commander evaluates his subordinates based on their performance, not on their personalities or other factors (.49).
- The company commander meets or exceeds all Army standards for personal appearance (.49).
- The company commander makes sure that what we do in this unit is necessary to accomplish our training mission (.47).
- When the company commander is told about a touchy or embarrassing problem, he tries to side-step the issue instead of facing it head-on (-.47).
- When something critical must be done by a member of this unit, the company commander checks to make sure it is done properly (.45).
- When the company commander warns a subordinate about something, he follows through with punishment if the subordinate's performance does not improve (.42).
- The company commander lets the person being counseled do most of the talking (.43).
- During counseling sessions, the company commander orders, threatens, criticizes or preaches (-.42).
- Whenever the company commander has to chew out a subordinate, he does it in private (.42).

Factor three deals with trust, particularly mutual trust: the extent to which the company commander trusts the drill sergeant and the extent to which the drill sergeants feel comfortable and confident that they are being dealt with fairly by the company commander. The items loading .4 or above on this factor are as follows:

- The company commander acts as if he doesn't trust my judgment (.64).
- I fear the consequences when I tell my company commander about a mistake my subordinates or I have made (.54).
- When the company commander establishes standards, they are reasonable--just about everyone thinks they can meet all the standards if they worked at it (-.44).
- The company commander comes down and tries to do a subordinate's job even when he is performing well (-.59).
- Even when he disagrees, the company commander keeps an open mind and listens to what others have to say (.48).
- Because of the company commander's attitude, I fail to let him know when things aren't going the way he expects them to (-.65).
- When the company commander is told about a touchy or embarrassing problem, he tries to side-step the issue instead of facing it head-on (-.46).
- During counseling sessions, the company commander orders, threatens, criticizes or preaches (-.53).
- The company commander doesn't let me do the things I was trained to do (-.43).
- I feel confident that my company commander will back me up when I make decisions (.51).
- The company commander ensures that decisions are made at the level where the most accurate and the most relevant information is to be found (.42).

It is noteworthy that a number of the items loading on this factor also cross-load on either the first or the second factor. In general, these three factors seem to represent a cluster dealing with overall

quality of the company commander. It is apparent that to some extent, the dimensions of mutual trust, consideration and concern, and leadership qualities overlap with one another. Nevertheless, they appear quite clearly to represent distinct components, and should be retained as separate dimensions. The next three factors are fairly minor in the sense that they involve only two or three items, and may reflect in part simply method variance. Nevertheless, the contents of the items allow a fairly easy labeling of the factors.

Factor four contains two items which deal with the handling of mixed sex training. The items are:

- The company commander demands that we take into account physical differences between the male and female trainees when we conduct training (.68), and
- The company commander acts quickly against members of the cadre who fraternize with trainees of the opposite sex (.68).

The inter-correlation between these two items is .40.

Factor five contains three items that, in general, reflect the extent to which the company commander is perceived as being fair. The item loading on this factor are:

- When the drill sergeants in this unit receive EERs, there are no surprises--performance is described in the same manner in which it had already been described during previous conversations (.61).
- The company commander does not punish a subordinate for poor performance unless there is reason to believe that the subordinate is no longer trying to perform well (.60), and
- There is enough time in the training cycle to allow trainees to practice skills until they have mastered them (.45).

It is interesting to note the added quality the addition of this last item onto this factor gives to the meaning of these factors. The external constraint of amount of time available to perform all the

tasks is seen as being related to the extent to which punishments and performance evaluations are fair.

Factor six contains the two items dealing with the perception of the company commander being under pressure from above to do a good job. These items are:

- The company commander is under a lot of pressure to see to it that I do a good job of training my trainees (.73), and
- The company commander is under a lot of pressure to see to it that I don't abuse the trainees (.72).

The inter-correlation among these items is .37, in spite of the high loadings. Thus, as with the preceding factor, internal consistency by combining these items into a scale would be modest at best.

Items Describing the First Sergeant

The first principal axis factor accounted for 49.2% of the total variance, making it one of the most global first factors in any of the item sets. The five factor rotated solution was selected as most interpretable; however this particular analysis was one of the messiest and most difficult to interpret. A great deal of cross-loading occurred for many items and my suspicion is that some of the problems arises from the more ambiguous role that the first sergeant plays in a unit. Quite frankly, if it were not for the fact that several other factors show a similarity to those found in structures described elsewhere, it would have been difficult or impossible to interpret.

Factor one, which is the global factor accounting for almost 50% of the variance, is labeled the consideration or sensitivity factor. Although there are a number of differences as well as similarities, the structure seems most similar to the factor describing the company commander's consideration behavior. Because of the large number of cross-loadings, only the two or three top-loading items will be described in this section. A complete presentation of the five factor structure can be found in Table 15. Examples of items on this factor are:

TABLE 15

DRILL SERGEANT QUESTIONNAIRE: VARIMAX ROTATED FACTOR MATRIX OF FIRST SERGEANT ITEMS

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5
VAR129	-.49793	-.22063	-.05653	-.62634	-.04986
VAR134	-.33113	-.14255	-.27373	-.61363	-.05678
VAR135	-.22805	-.61269	-.22513	-.37635	-.10260
VAR136	-.22805	-.24131	-.11973	-.63002	-.26715
VAR137	-.51203	-.46327	-.11139	-.59482	-.10563
VAR138	-.51203	-.25376	-.21850	-.54764	-.04332
VAR139	-.49140	-.11290	-.24393	-.74650	-.11048
VAR140	-.11048	-.16551	-.45223	-.41393	-.30786
VAR141	-.22374	-.33533	-.31423	-.36403	-.18991
VAR142	-.11048	-.33533	-.31423	-.36403	-.18991
VAR143	-.62634	-.04570	-.10260	-.13252	-.64450
VAR144	-.62634	-.16551	-.31423	-.13252	-.14050
VAR145	-.12203	-.12203	-.10331	-.20407	-.23369
VAR146	-.36615	-.36615	-.32900	-.07637	-.19794
VAR147	-.72005	-.72005	-.23307	-.19812	-.11331
VAR148	-.49140	-.49140	-.33737	-.20323	-.12419
VAR149	-.33333	-.33333	-.33737	-.20323	-.12419
VAR150	-.49140	-.49140	-.33737	-.20323	-.12419
VAR151	-.33333	-.33333	-.33737	-.20323	-.12419
VAR152	-.33333	-.33333	-.33737	-.20323	-.12419
VAR153	-.33333	-.33333	-.33737	-.20323	-.12419
VAR154	-.33333	-.33333	-.33737	-.20323	-.12419
VAR155	-.33333	-.33333	-.33737	-.20323	-.12419
VAR156	-.33333	-.33333	-.33737	-.20323	-.12419
VAR157	-.33333	-.33333	-.33737	-.20323	-.12419
VAR158	-.33333	-.33333	-.33737	-.20323	-.12419
VAR159	-.33333	-.33333	-.33737	-.20323	-.12419
VAR160	-.33333	-.33333	-.33737	-.20323	-.12419
VAR161	-.33333	-.33333	-.33737	-.20323	-.12419
VAR162	-.33333	-.33333	-.33737	-.20323	-.12419
VAR163	-.33333	-.33333	-.33737	-.20323	-.12419
VAR164	-.33333	-.33333	-.33737	-.20323	-.12419
VAR165	-.33333	-.33333	-.33737	-.20323	-.12419
VAR166	-.33333	-.33333	-.33737	-.20323	-.12419
VAR167	-.33333	-.33333	-.33737	-.20323	-.12419
VAR168	-.33333	-.33333	-.33737	-.20323	-.12419
VAR169	-.33333	-.33333	-.33737	-.20323	-.12419
VAR170	-.33333	-.33333	-.33737	-.20323	-.12419
VAR171	-.33333	-.33333	-.33737	-.20323	-.12419
VAR172	-.33333	-.33333	-.33737	-.20323	-.12419
VAR173	-.33333	-.33333	-.33737	-.20323	-.12419
VAR174	-.33333	-.33333	-.33737	-.20323	-.12419
VAR175	-.33333	-.33333	-.33737	-.20323	-.12419
VAR176	-.33333	-.33333	-.33737	-.20323	-.12419
VAR177	-.33333	-.33333	-.33737	-.20323	-.12419
VAR178	-.33333	-.33333	-.33737	-.20323	-.12419
VAR179	-.33333	-.33333	-.33737	-.20323	-.12419
VAR180	-.33333	-.33333	-.33737	-.20323	-.12419
VAR181	-.33333	-.33333	-.33737	-.20323	-.12419
VAR182	-.33333	-.33333	-.33737	-.20323	-.12419
VAR183	-.33333	-.33333	-.33737	-.20323	-.12419
VAR184	-.33333	-.33333	-.33737	-.20323	-.12419
VAR185	-.33333	-.33333	-.33737	-.20323	-.12419
VAR186	-.33333	-.33333	-.33737	-.20323	-.12419
VAR187	-.33333	-.33333	-.33737	-.20323	-.12419
VAR188	-.33333	-.33333	-.33737	-.20323	-.12419
VAR189	-.33333	-.33333	-.33737	-.20323	-.12419
VAR190	-.33333	-.33333	-.33737	-.20323	-.12419
VAR191	-.33333	-.33333	-.33737	-.20323	-.12419
VAR192	-.33333	-.33333	-.33737	-.20323	-.12419
VAR193	-.33333	-.33333	-.33737	-.20323	-.12419
VAR194	-.33333	-.33333	-.33737	-.20323	-.12419
VAR195	-.33333	-.33333	-.33737	-.20323	-.12419
VAR196	-.33333	-.33333	-.33737	-.20323	-.12419
VAR197	-.33333	-.33333	-.33737	-.20323	-.12419
VAR198	-.33333	-.33333	-.33737	-.20323	-.12419
VAR199	-.33333	-.33333	-.33737	-.20323	-.12419
VAR200	-.33333	-.33333	-.33737	-.20323	-.12419

- Whenever the first sergeant refers a subordinate to a helping agency, he follows up by checking to see that the agency did some good (.71).
- When a subordinate does something wrong or performs a task poorly, the first sergeant personally let him know about it (.73).
- When the first sergeant determines that a subordinate has a serious problem, he refers him to a helping agency (.67).
- When someone in the unit wants to talk to him, the first sergeant makes himself available (.63), and
- When something critical must be done by a member of this unit, the first sergeant checks to make sure it is done properly (.66).

Factor two appears to be a mutual trust factor in the sense described earlier for the items describing the company commander. Again, because of the large number of cross-loadings, only the most significant items will be described in this paragraph. The entire loading set can be found in Table 15. Items defining this factor included:

- When a subordinate is performing well, the first sergeant comes down and tries to do the subordinate's job (-.71).
- During counseling sessions, the first sergeant orders, threatens, criticizes or preaches (-.73).
- The first sergeant acts as if he doesn't trust my judgment (.61).
- The first sergeant is courteous when dealing with his subordinates (.57).

It is worth noting that the concept of trust is very closely bound up with being courteous in dealing with the drill sergeant.

Factor three appears to be a mixed bag of items that roughly relate to the concept of fairness. Four items loaded above .4.

- The first sergeant gets orders that do not violate local policy, SOP, regulations, or the UCMJ (.45).

- The first sergeant lets a person being counseled do most of the talking (.69).
- The first sergeant is courteous when dealing with his subordinates (.42).
- The first sergeant does not punish a subordinate or recommend him for punishment for poor performance unless there is reason to believe that the subordinate is no longer trying to perform well (.58).

Factor four appears to correspond roughly to the dimension labeled "quality of leadership" in the company commander analyses. Items loading on this factor include:

- Our first sergeant made it clear from the beginning how well we were required to perform each task (-.63).
- My first sergeant knows enough about my job to identify when I perform poorly (-.61).
- When I first arrived in my present assignment, my first sergeant made sure that I received training and other assistance in performing tasks which I was not already familiar with (-.63).
- Our first sergeant keeps us informed about what tasks he expects us to perform (.55).
- The first sergeant's punishments seem to be fair (-.59).
- When we receive a new requirement or mission, the first sergeant makes sure we understand the reason for it (.55).
- The first sergeant gives orders that do not violate local policies, SOP regulations, or the UCMJ (.42).
- The first sergeant makes sure that what he tells us to do is necessary to accomplish our training mission (.52).
- When the first sergeant rewards me for good performance, he gives me a reward that means something to me (.40).

Two points about this factor need to be kept in mind. One is that the concept of leadership strongly incorporates the idea of explaining the purposes for one's actions and providing adequate structuring and training. Again, several of these items cross-loaded on some of the preceding factors.

Factor five is essentially the mixed-sex factor involving two items, one strongly and one weakly. Items loading on this factor were:

- Our first sergeant demands that we take into account physical differences between male and female trainees when we conduct training (.80).
- The first sergeant acts quickly against members of the cadre who fraternize with trainees of the opposite sex (.40).

The Pearson correlation between these two items, however, was only .28.

In summary, the extensive cross-loading and the lack of clarity in interpreting the factors leads one to be very cautious in the creation of scales from these items. As indicated previously, my suspicion is that while the factor structure appears to be recognizable as that appearing for the company commander descriptions, the messiness and ambiguity are primarily a result of the more ambiguous role as a leader rather than as a paper-pushing administrator that the first sergeant typically plays in a training situation. In other words, many of these items are not seen as being as relevant to describing the first sergeant's behavior as they are for describing the company commander.

General Items

There were 73 general items spread throughout the drill sergeant questionnaire. An n of 425 provides an adequate sample size for the factor analyses. The initial principal axis factor accounted for 11.3 percent of the variance with the second factor accounting for 5.8 percent of the variance, followed by a general decline in variance accounted for with subsequent factors. This pattern confirms the findings in other sections of this report that the first factor is inevitably substantially larger than the subsequent factors, but that the general items not describing an individual result in a much smaller gap between the first and second factor than do items describing a specific individual. A decision on the best rotated solution was made somewhat more difficult than in the other data sets because of the appearance of a rather weak factor in the midst of otherwise fairly well defined and easily interpreted factors. This phenomenon occurred on rotations involving more

than four factors. The nine factor solution was finally decided upon primarily because of the added meaningful information provided by using such a large structure. This decision was made in spite of the presence of a couple of weak and difficult to interpret factors. This somewhat less conservative decision was made partly with the knowledge that subsequent data collections in the overall project would provide an opportunity to confirm or disconfirm the stability and meaningfulness of the factors, particularly those that appeared beyond the fourth factor. We are reasonably confident that the first four or five factors will replicate without any difficulty. The real question involves the utility and stability of the remaining, somewhat minor factors. The nine factor solution is presented in Table 16.

Factor one could be labelled a "unit pride" factor as reflected in the following items:

- All in all, officers in this unit do a fine job (.68).
- We get together as a work group to identify problems and, when possible, solve them and implement the recommended changes (.71).
- The people in this unit show that they have alot of pride in what they are doing (.72).
- The whole team pitches in and helps straighten things out when one individual makes a mistake (.72).
- All in all, drill sergeants in this unit do a fine job (.51).
- I get along well with the other drill sergeants (.45).
- I would like to remain in this unit beyond my regular tour of duty (.52).
- All in all, I am satisfied with my job (.46).
- I am satisfied that on graduation day, we turn out trainees who are fully prepared for either advanced training or for duty positions in field units (.41).
- There is more emphasis on punishment than on rewards in dealing with trainees in my company (-.41).

TABLE 15

DRILL SERGEANT QUESTIONNAIRE: VARIMAX ROTATED FACTOR
MATRIX OF GENERAL ITEMS

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4
VAR1	.09107	.01195	.1126	.06844
VAR2	.14999	.10255	.00000	.02806
VAR3	.12788	.08000	.00000	.16660
VAR4	.12788	.08000	.00000	.16660
VAR5	.02222	.02222	.00000	.25668
VAR6	.00000	.19522	.00000	.30668
VAR7	.00000	.19522	.00000	.30668
VAR8	.00000	.19522	.00000	.30668
VAR9	.00000	.19522	.00000	.30668
VAR10	.00000	.19522	.00000	.30668
VAR11	.00000	.19522	.00000	.30668
VAR12	.00000	.19522	.00000	.30668
VAR13	.00000	.19522	.00000	.30668
VAR14	.00000	.19522	.00000	.30668
VAR15	.00000	.19522	.00000	.30668
VAR16	.00000	.19522	.00000	.30668
VAR17	.00000	.19522	.00000	.30668
VAR18	.00000	.19522	.00000	.30668
VAR19	.00000	.19522	.00000	.30668
VAR20	.00000	.19522	.00000	.30668
VAR21	.00000	.19522	.00000	.30668
VAR22	.00000	.19522	.00000	.30668
VAR23	.00000	.19522	.00000	.30668
VAR24	.00000	.19522	.00000	.30668
VAR25	.00000	.19522	.00000	.30668
VAR26	.00000	.19522	.00000	.30668
VAR27	.00000	.19522	.00000	.30668
VAR28	.00000	.19522	.00000	.30668
VAR29	.00000	.19522	.00000	.30668
VAR30	.00000	.19522	.00000	.30668
VAR31	.00000	.19522	.00000	.30668
VAR32	.00000	.19522	.00000	.30668
VAR33	.00000	.19522	.00000	.30668
VAR34	.00000	.19522	.00000	.30668
VAR35	.00000	.19522	.00000	.30668
VAR36	.00000	.19522	.00000	.30668
VAR37	.00000	.19522	.00000	.30668
VAR38	.00000	.19522	.00000	.30668
VAR39	.00000	.19522	.00000	.30668
VAR40	.00000	.19522	.00000	.30668
VAR41	.00000	.19522	.00000	.30668
VAR42	.00000	.19522	.00000	.30668
VAR43	.00000	.19522	.00000	.30668
VAR44	.00000	.19522	.00000	.30668
VAR45	.00000	.19522	.00000	.30668
VAR46	.00000	.19522	.00000	.30668
VAR47	.00000	.19522	.00000	.30668
VAR48	.00000	.19522	.00000	.30668
VAR49	.00000	.19522	.00000	.30668
VAR50	.00000	.19522	.00000	.30668

TABLE 16 (CONTINUED)

	FACTOR 5	FACTOR 6	FACTOR 7	FACTOR 8	FACTOR 9
VAR1	11	11	11	11	11
VAR2	11	11	11	11	11
VAR3	11	11	11	11	11
VAR4	11	11	11	11	11
VAR5	11	11	11	11	11
VAR6	11	11	11	11	11
VAR7	11	11	11	11	11
VAR8	11	11	11	11	11
VAR9	11	11	11	11	11
VAR10	11	11	11	11	11
VAR11	11	11	11	11	11
VAR12	11	11	11	11	11
VAR13	11	11	11	11	11
VAR14	11	11	11	11	11
VAR15	11	11	11	11	11
VAR16	11	11	11	11	11
VAR17	11	11	11	11	11
VAR18	11	11	11	11	11
VAR19	11	11	11	11	11
VAR20	11	11	11	11	11
VAR21	11	11	11	11	11
VAR22	11	11	11	11	11
VAR23	11	11	11	11	11
VAR24	11	11	11	11	11
VAR25	11	11	11	11	11
VAR26	11	11	11	11	11
VAR27	11	11	11	11	11
VAR28	11	11	11	11	11
VAR29	11	11	11	11	11
VAR30	11	11	11	11	11
VAR31	11	11	11	11	11
VAR32	11	11	11	11	11
VAR33	11	11	11	11	11
VAR34	11	11	11	11	11
VAR35	11	11	11	11	11
VAR36	11	11	11	11	11
VAR37	11	11	11	11	11
VAR38	11	11	11	11	11
VAR39	11	11	11	11	11
VAR40	11	11	11	11	11
VAR41	11	11	11	11	11
VAR42	11	11	11	11	11
VAR43	11	11	11	11	11
VAR44	11	11	11	11	11
VAR45	11	11	11	11	11
VAR46	11	11	11	11	11
VAR47	11	11	11	11	11
VAR48	11	11	11	11	11
VAR49	11	11	11	11	11
VAR50	11	11	11	11	11

TABLE 16 (CONTINUED)

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4
VAR117	-.03603	.24822	.11674	.13184
VAR118	-.06742	.73005	.09003	-.01317
VAR119	.04982	-.16354	.02753	.03639
VAR120	.23488	-.01770	.12440	.00337
VAR121	.20444	-.47140	.03724	.06381
VAR122	.00044	.12901	.14552	.00694
VAR123	-.06722	.68502	.07491	.00098
VAR124	-.01135	-.33798	.07962	.00658
VAR125	.06327	.71197	.02517	.12581
VAR126	-.04089	-.45324	-.00165	.00463
VAR127	-.04410	.63983	.06306	.09075
VAR128	.45522	.55164	-.04204	.13464

TABLE 16 (CONTINUED)

	FACTOR 5	FACTOR 6	FACTOR 7	FACTOR 8	FACTOR 9
VAR117	-.27291	.36934	-.22946	-.01026	.08296
VAR118	-.04282	-.05685	-.08197	-.02907	.06176
VAR119	-.09425	-.07293	.01375	-.00065	.24830
VAR120	-.07984	-.18195	.28455	.18433	.07963
VAR121	.13782	.11412	.02712	-.09663	.12971
VAR122	.07628	.07686	-.11376	-.04712	-.23495
VAR123	-.06147	.10219	-.09748	.05680	-.09604
VAR124	.12367	-.01185	.21029	.17452	.22018
VAR125	.04181	.05744	-.02101	.04239	.03942
VAR126	.04606	.15500	-.13908	.00512	-.15596
VAR127	.02448	.07780	-.17301	-.11569	-.04838
VAR128	.10356	-.03803	-.11831	.07198	.16397

Factor two is very clearly a "tension or stress" factor. Items loading on this factor included:

- I sometimes think I could break under all of the pressure that I am getting (.73).
- After a days work I frequently go home with a headache (.71).
- Lately I've been tense about my work (.69).
- When I first wake up in the morning and think of going to work, I get a stomach ache (.64).
- If I could, I'd get out from under the hat right now (.61).
- All in all, I am satisfied with my job (-.55).
- Many times my job and my family pull me in opposite directions (.53).
- I have to work such long hours, the quality of my performance suffers (-.52).
- My family wants me to leave the Army because its demands interfere with my family life (.45).
- The amount of work I have to do is reasonable (-.47).
- I hardly ever worry about my job (-.45).

Factor three encompasses what we would call "old fashioned attitudes towards discipline." It includes the following items:

- New trainees think too independently and need to be leaned on hard for awhile (.50).
- If a trainee is to learn to be a good soldier he must experience alot of physical and mental stress during basic training (.55).
- You've got to swear at the trainees or scare them in order to control what they do (.63).
- I can get alot more out of the trainees by threatening to punish them than I can by trying to counsel them (.65).
- Alot of trainees can't be made to do what is necessary unless the drill sergeant acts like he is going to get physical with them (.67).

- Some of the things we are supposed to do to teach the trainees are just theories that can't be applied as effectively as old fashioned fear (.54).
- I wish the trainees were of the same quality they were in the days of the draft (.42).
- This would have been a much better unit if some of the trainees had been weeded out earlier by use of the trainee discharge program (.40).
- I sometimes get the feeling that about the only kinds of people volunteering for the Army nowadays are those who have been rejected everywhere else (.49).
- I holler and scream more than the other drill sergeants (.42).

Factor four is composed of several items that basically reflect the drill sergeant's evaluation of the drill sergeant school they attended.

Items loading on this factor were:

- I had used a good deal of what I learned in the drill sergeant course to help me successfully motivate trainees (.68).
- The drill sergeant course taught me the necessary skills I need to lead my trainees (.63).
- When I tried the leadership techniques I learned in drill sergeant school, I found that none of them worked (-.53).
- I don't think the drill sergeant school adequately prepared me for the problems I had to face (-.60).
- I was given enough time during the cycle to teach the trainees how to "soldier" (.41).

Factor five is a perception of the extent to which trainees have adequate self discipline, and includes an implicit belief about why females may be less easily trained. Items on this factor were:

- After about three weeks in the cycle I don't have to lean on the trainees as much (.56).
- Within a few weeks most of the trainees handle self discipline really well (.59).

- There is a place for female trainees in the kind of training we are supposed to be doing (.67).
- I would be upset if I had to train a female platoon (-.44).
- Our female trainees will eventually make as good soldiers as male trainees (.61).

Factor six is a rather ambiguous factor that appears to reflect a general perception of the respondent's style as a drill sergeant. It contains only one item loading above .5. The items on this factor were:

- The other drill sergeants think that I am too soft on the trainees (.53).
- For reinforcement training, I often have to teach subjects that I am not familiar with (.49).
- My trainees could do just as well with a lot less supervision from me (.43).

The general tone of this factor appears to reflect the extent to which the drill sergeant feels that too much supervision is unnecessary. He also perceives this belief as being related to perceptions of being too soft.

Factor seven deals rather specifically with whether or not the unit is perceived to be graduating unqualified trainees, whether male or female. The items loading here were:

- Our unit permits male trainees to graduate even when they have failed to perform to standards on performance tests (.61).
- Our unit permits female trainees to graduate even when they have failed to perform to standards on performance tests (.62).
- Having another drill sergeant in the platoon relieves a lot of the stress (.43).

This last item again suggests an interesting linkage being made in the minds of the drill sergeant between having enough staff in the unit and the ability to train soldiers up to the appropriate level of ability.

Factor eight is the other of the two rather ambiguous factors that appeared in this structure. It actually has no items loading above .5, and we therefore choose to leave it uninterpreted. The highest loading item in this factor was:

- I use a referral list when trainees have problems I can't solve (.43).

Factor nine deals with family support. It contained three items:

- My family is not interested in my work (-.71).
- I get a lot of understanding from my family when things are not going well in the unit (.68).
- My family wants me to leave the Army because its demands interfere with my family life (-.47).

This latter item cross-loaded on the "tension and stress" factor, but the other two items broke out very cleanly from that factor.

CHAPTER 5

SOLDIER'S QUESTIONNAIRE

The soldier's questionnaire contained three distinct sets of items. The first section consisted of 16 general attitudinal and perceptual items that were subjected to one set of factor analyses. The remaining two sections in the questionnaire contained descriptions of each of two drill sergeants with whom the trainee had interacted. Drill sergeants were dichotomized along two separate characteristics: (1) whether they were trained in the self-paced or in the eight week POI; and (2) whether they were listed first or second by the trainees on the soldier's questionnaire. This procedure yielded a four-fold categorization of drill sergeants: (1) eight week POI/first listed; (2) eight week POI/second listed; (3) self-paced POI/first listed; and (4) self-paced POI/second listed. A factor analyses for each of the four combinations of these groupings was then performed. This approach was taken in order to look at the effects of a replication of the analyses on the stability of the factor structure, and to examine the stability or generalizability of the factor structures across dimensions of major relevance in this study: the type of training received by the drill sergeants.

It was assumed that the first described drill sergeant would have been most familiar to the trainees and would provide the most reliable data. It was also expected that the sample sizes for the two sets of analyses would be larger for the first listed drill sergeant, since a number of trainees did not describe a second drill sergeant. Means for the general items and for each of the four subsets of drill sergeant descriptions are presented in Tables 17, 18, 19, 20, and 21.

General Items

Based on an n of 2,236, the factor analyses were performed on the 16 general perceptual items. The two-factor rotated solution was deemed to be best and is presented in Table 22. *Factor one* accounted for 23.5 percent of the variance, while *factor two* accounted for an additional 10.6 percent of the variance.

TABLE 17
SOLDIER'S QUESTIONNAIRE: GENERAL ITEMS

VARIABLE	MEAN	STANDARD DEV	CASES
VAR1	4.3913	.9050	2236
VAR2	1.7348	1.1068	2236
VAR3	4.1073	1.0823	2236
VAR4	4.4352	1.0275	2236
VAR5	4.5005	.9256	2236
VAR6	4.1968	1.0974	2236
VAR7	3.9445	1.2094	2236
VAR8	3.4262	1.2526	2236
VAR9	3.4343	1.3296	2236
VAR10	3.8372	1.2444	2236
VAR11	3.5801	1.2851	2236
VAR12	3.5899	1.3615	2236
VAR13	3.8913	1.2615	2236
VAR14	4.6869	.7823	2236
VAR15	4.2013	1.0017	2236
VAR16	3.4065	1.3694	2236

TABLE 18

SOLDIER'S QUESTIONNAIRE: ITEMS OF FIRST LISTED
 DRILL SERGEANT TRAINED IN 8-WEEK POI

VARIABLE	MEAN	STANDARD DEV	CASES
DS1	2.0075	1.1121	400
DS2	1.7800	1.1121	400
DS3	1.3550	1.1121	400
DS4	1.3550	1.1121	400
DS5	1.3550	1.1121	400
DS6	1.3550	1.1121	400
DS7	1.3550	1.1121	400
DS8	1.3550	1.1121	400
DS9	1.3550	1.1121	400
DS10	1.3550	1.1121	400
DS11	1.3550	1.1121	400
DS12	1.3550	1.1121	400
DS13	1.3550	1.1121	400
DS14	1.3550	1.1121	400
DS15	1.3550	1.1121	400
DS16	1.3550	1.1121	400
DS17	1.3550	1.1121	400
DS18	1.3550	1.1121	400
DS19	1.3550	1.1121	400
DS20	1.3550	1.1121	400
DS21	1.3550	1.1121	400
DS22	1.3550	1.1121	400
DS23	1.3550	1.1121	400
DS24	1.3550	1.1121	400
DS25	1.3550	1.1121	400
DS26	1.3550	1.1121	400
DS27	1.3550	1.1121	400
DS28	1.3550	1.1121	400
DS29	1.3550	1.1121	400
DS30	1.3550	1.1121	400
DS31	1.3550	1.1121	400
DS32	1.3550	1.1121	400
DS33	1.3550	1.1121	400
DS34	1.3550	1.1121	400
DS35	1.3550	1.1121	400
DS36	1.3550	1.1121	400
DS37	1.3550	1.1121	400
DS38	1.3550	1.1121	400
DS39	1.3550	1.1121	400
DS40	1.3550	1.1121	400
DS41	1.3550	1.1121	400
DS42	1.3550	1.1121	400
DS43	1.3550	1.1121	400
DS44	1.3550	1.1121	400
DS45	1.3550	1.1121	400
DS46	1.3550	1.1121	400
DS47	1.3550	1.1121	400
DS48	1.3550	1.1121	400
DS49	1.3550	1.1121	400
DS50	1.3550	1.1121	400
DS51	1.3550	1.1121	400
DS52	1.3550	1.1121	400
DS53	1.3550	1.1121	400
DS54	1.3550	1.1121	400
DS55	1.3550	1.1121	400
DS56	1.3550	1.1121	400
DS57	1.3550	1.1121	400
DS58	1.3550	1.1121	400
DS59	1.3550	1.1121	400
DS60	1.3550	1.1121	400
DS61	1.3550	1.1121	400
DS62	1.3550	1.1121	400
DS63	1.3550	1.1121	400
DS64	1.3550	1.1121	400
DS65	1.3550	1.1121	400
DS66	1.3550	1.1121	400
DS67	1.3550	1.1121	400
DS68	1.3550	1.1121	400
DS69	1.3550	1.1121	400
DS70	1.3550	1.1121	400
DS71	1.3550	1.1121	400
DS72	1.3550	1.1121	400
DS73	1.3550	1.1121	400
DS74	1.3550	1.1121	400
DS75	1.3550	1.1121	400
DS76	1.3550	1.1121	400
DS77	1.3550	1.1121	400
DS78	1.3550	1.1121	400
DS79	1.3550	1.1121	400
DS80	1.3550	1.1121	400
DS81	1.3550	1.1121	400
DS82	1.3550	1.1121	400
DS83	1.3550	1.1121	400
DS84	1.3550	1.1121	400
DS85	1.3550	1.1121	400
DS86	1.3550	1.1121	400
DS87	1.3550	1.1121	400
DS88	1.3550	1.1121	400
DS89	1.3550	1.1121	400
DS90	1.3550	1.1121	400
DS91	1.3550	1.1121	400
DS92	1.3550	1.1121	400
DS93	1.3550	1.1121	400
DS94	1.3550	1.1121	400
DS95	1.3550	1.1121	400
DS96	1.3550	1.1121	400
DS97	1.3550	1.1121	400
DS98	1.3550	1.1121	400
DS99	1.3550	1.1121	400
DS100	1.3550	1.1121	400

TABLE 19

SOLDIER'S QUESTIONNAIRE: ITEMS OF FIRST LISTED
 DRILL SERGEANT TRAINED IN THE SELF-PACED POI

VARIABLE	MEAN	STANDARD DEV	CASES
DS1	1.9873	1.2014	788
DS2	3.6832	1.1580	788
DS3	4.5241	.8439	788
DS4	3.2805	1.3783	788
DS5	1.5076	.9949	788
DS6	2.4112	1.5574	788
DS7	2.3947	1.4620	788
DS8	2.3341	1.1662	788
DS9	4.0160	1.2546	788
DS10	3.0216	1.2331	788
DS11	3.9360	1.1943	788
DS12	3.4797	.9449	788
DS13	4.4886	.9332	788
DS14	4.4074	.9593	788
DS15	4.8084	.6677	788
DS16	4.6675	.7101	788
DS17	4.3601	1.1161	788
DS18	4.7381	1.7518	788
DS19	4.5110	1.2527	788
DS20	4.4987	1.5320	788
DS21	4.1599	1.2024	788
DS22	3.6338	1.2335	788
DS23	4.3754	1.0022	788
DS24	4.3722	.7641	788
DS25	4.4229	.7532	788
DS26	4.3794	.7524	788
DS27	4.3063	1.2476	788
DS28	4.3782	1.6979	788
DS29	4.3041	1.0949	788
DS30	4.3372	1.1377	788
DS31	4.3677	1.0804	788
DS32	4.4554	.7684	788
DS33	4.4683	1.2126	788
DS34	4.5584	1.0824	788
DS35	4.2475	1.0030	788
DS36	4.4593	1.1889	788
DS37	4.4593	1.0800	788
DS38	4.3160	1.1007	788
DS39	4.3102	1.0524	788
DS40	4.4606	1.4433	788
DS41	4.6459	1.4743	788
DS42	4.6557	1.4009	788
DS43	4.0051	1.4214	788
DS44	4.4155	1.0945	788
DS45	4.2513	1.1000	788
DS46	4.2513	1.1000	788
DS47	4.2513	1.1000	788
DS48	4.2513	1.1000	788
DS49	4.2513	1.1000	788
DS50	4.2513	1.1000	788
DS51	4.2513	1.1000	788
DS52	4.2513	1.1000	788
DS53	4.2513	1.1000	788
DS54	4.2513	1.1000	788
DS55	4.2513	1.1000	788
DS56	4.2513	1.1000	788
DS57	4.2513	1.1000	788
DS58	4.2513	1.1000	788
DS59	4.2513	1.1000	788
DS60	4.2513	1.1000	788
DS61	4.2513	1.1000	788
DS62	4.2513	1.1000	788

TABLE 20

SOLDIER'S QUESTIONNAIRE: ITEMS OF SECOND LISTED
 DRILL SERGEANT TRAINED IN THE 8-WEEK POI

VARIABLE	MEAN	STANDARD DEV	CASES
05101	3.1341	1.2783	507
05102	3.6667	1.1967	507
05103	3.2860	1.0867	507
05104	3.2130	1.3622	507
05105	3.7712	1.1724	507
05106	3.6134	1.5819	507
05107	3.4356	1.4332	507
05108	3.0927	1.2512	507
05109	3.9467	1.3500	507
05110	3.0197	1.2430	507
05111	3.0158	1.3931	507
05112	3.4063	1.3101	507
05113	3.4162	1.0323	507
05114	3.2899	1.0372	507
05115	3.6963	1.0860	507
05116	3.5720	1.0823	507
05117	3.3471	1.0855	507
05118	3.5562	1.0800	507
05119	3.1420	1.2190	507
05120	3.3254	1.2381	507
05121	3.0099	1.2090	507
05122	3.7870	1.1920	507
05123	3.1440	1.1440	507
05124	3.6911	1.0823	507
05125	3.5010	1.0823	507
05126	3.5621	1.0823	507
05127	3.4951	1.0823	507
05128	3.8757	1.0823	507
05129	3.4224	1.0823	507
05130	3.9132	1.0823	507
05131	3.9542	1.0823	507
05132	3.9169	1.0823	507
05133	3.8067	1.0823	507
05134	3.5562	1.0823	507
05135	3.7511	1.0823	507
05136	3.7179	1.0823	507
05137	3.1144	1.0823	507
05138	3.4297	1.0823	507
05139	3.5976	1.0823	507
05140	3.9152	1.0823	507
05141	3.5483	1.0823	507
05142	3.4297	1.0823	507
05143	3.5564	1.0823	507
05144	3.0631	1.0823	507
05145	3.1617	1.0823	507
05146	3.0877	1.0823	507
05147	3.9714	1.0823	507
05148	3.8776	1.0823	507
05149	3.9129	1.0823	507
05150	3.0054	1.0823	507
05151	3.7330	1.0823	507
05152	3.6469	1.0823	507
05153	3.8668	1.0823	507
05154	3.8556	1.0823	507
05155	3.1006	1.0823	507
05156	3.8888	1.0823	507
05157	3.8888	1.0823	507
05158	3.8888	1.0823	507
05159	3.8888	1.0823	507
05160	3.8888	1.0823	507
05161	3.8888	1.0823	507
05162	3.8888	1.0823	507
05163	3.8888	1.0823	507
05164	3.8888	1.0823	507
05165	3.8888	1.0823	507
05166	3.8888	1.0823	507
05167	3.8888	1.0823	507
05168	3.8888	1.0823	507
05169	3.8888	1.0823	507
05170	3.8888	1.0823	507
05171	3.8888	1.0823	507
05172	3.8888	1.0823	507
05173	3.8888	1.0823	507
05174	3.8888	1.0823	507
05175	3.8888	1.0823	507
05176	3.8888	1.0823	507
05177	3.8888	1.0823	507
05178	3.8888	1.0823	507
05179	3.8888	1.0823	507
05180	3.8888	1.0823	507
05181	3.8888	1.0823	507
05182	3.8888	1.0823	507
05183	3.8888	1.0823	507
05184	3.8888	1.0823	507
05185	3.8888	1.0823	507
05186	3.8888	1.0823	507
05187	3.8888	1.0823	507
05188	3.8888	1.0823	507
05189	3.8888	1.0823	507
05190	3.8888	1.0823	507
05191	3.8888	1.0823	507
05192	3.8888	1.0823	507
05193	3.8888	1.0823	507
05194	3.8888	1.0823	507
05195	3.8888	1.0823	507
05196	3.8888	1.0823	507
05197	3.8888	1.0823	507
05198	3.8888	1.0823	507
05199	3.8888	1.0823	507
05200	3.8888	1.0823	507

TABLE 21

SOLDIER'S QUESTIONNAIRE: ITEMS OF SECOND LISTED
 DRILL SERGEANT TRAINED IN THE SELF-PACED POI

VARIABLE	MEAN	STANDARD DEV	CASES
DS1001	2.1970	1.3146	731
DS1002	3.7832	1.2103	731
DS1003	4.2242	1.1141	731
DS1004	3.3351	1.3792	731
DS1005	1.8249	1.1501	731
DS1006	2.4487	1.5038	731
DS1009	2.6252	1.4671	731
DS1009	4.0096	1.3492	731
DS1009	3.8222	1.3380	731
DS1100	4.0065	1.2018	731
DS1101	4.0136	1.1760	731
DS1102	4.4063	1.0975	731
DS1103	4.4118	1.0211	731
DS1104	4.3461	.9774	731
DS1105	4.4606	.6549	731
DS1106	4.5023	.8919	731
DS1107	4.3023	1.1227	731
DS1108	4.4829	.9512	731
DS1109	2.1778	1.2643	731
DS1200	2.3940	1.4518	731
DS1201	3.3844	1.2355	731
DS1202	3.7073	1.2839	731
DS1203	4.2161	1.1103	731
DS1204	1.5103	.8013	731
DS1205	1.5048	.7840	731
DS1206	1.4952	.7910	731
DS1207	1.4523	.7792	731
DS1208	1.9179	1.1804	731
DS1209	1.4768	.8213	731
DS1300	2.0711	1.1857	731
DS1301	2.0397	1.1750	731
DS1302	1.9877	1.1413	731
DS1303	1.8960	1.0933	731
DS1304	1.6147	.9619	731
DS1305	2.3639	1.2437	731
DS1306	1.6394	.9321	731
DS1307	2.2608	1.1430	731
DS1308	2.2170	1.2009	731
DS1309	1.6115	.8001	731
DS1400	2.1260	1.1218	731
DS1401	1.0274	.5111	731
DS1402	1.6676	1.0522	731
DS1403	1.3447	.5393	731
DS1404	1.3434	.5277	731
DS1405	1.0034	.4455	731
DS1406	1.3201	.5313	731
DS1408	1.7606	.9853	731
DS1409	1.8988	1.1379	731
DS1500	1.9644	1.0176	731
DS1501	1.9918	1.0854	731
DS1502	2.0033	1.1644	731
DS1503	1.6336	.8048	731
DS1504	1.6205	.8000	731
DS1505	1.7305	1.4000	731
DS1506	1.3305	.5500	731
DS1507	1.1040	.4500	731
DS1508	1.3558	.7500	731
DS1600	1.4131	.7466	731
DS1602	1.8376	.9944	731

TABLE 22
SOLDIER'S QUESTIONNAIRE: VARIMAX ROTATED FACTOR MATRIX
OF GENERAL ITEMS

	FACTOR 1	FACTOR 2
VAR1	.30456	.52005
VAR2	.01674	-.76226
VAR3	.27900	.74694
VAR4	.48211	.28328
VAR5	.22157	.28628
VAR6	.65922	.70163
VAR7	.42334	.30551
VAR8	.14059	.64256
VAR9	.45592	.75743
VAR10	.03075	-.76135
VAR11	.23095	.77741
VAR12	-.05521	-.16957
VAR13	.66585	-.7247
VAR14	.50951	.23262
VAR15	.61044	.21475
VAR16	.62511	.79460

Factor one was defined as a "general quality of training factor. The highest loading items included:

- The training I received was hard and made me show how well I could do (.66).
- The drill sergeants had enough time during the cycle to teach us how to be good soldiers (.67).

Also loading very highly on this factor were:

- Right now I am sure my body is in very good physical condition due to physical training (.61).
- There was enough time during the training cycle to allow us to practice new skills until we had mastered them (.63).

Moderately loading items were:

- All the things I learned now are important for a soldier to know (.48).
- We are happy in this platoon (.42).
- Most trainees can be left without someone to watch them and still do all they're supposed to do (.46).
- Right now, because of the training I've received, I am sure I can hit targets with my weapon (.51).

Factor two was an "attitude toward the Army" factor. Highest loading items were:

- I'm sorry I enlisted in the Army (-.79).
- If I could get out of the Army at any time, I would get out right now (-.76).

Three additional items loaded moderately high on this factor. They were:

- I feel that I am serving my country well by being in the Army (.52).
- I look forward to my Army job after I finish training (.60).
- I would like to make the Army a career (.64).

It might be worth mentioning in passing that an intriguing factor appeared in the three and four-factor rotated solution, but dropped out in the

fifth and sixth level solution. There were basically two items defining this factor:

- There was a lot of competition among platoons (.61).
- The drill sergeants in this unit often give conflicting orders, telling us to do things differently (.65).

It was decided not to include this factor as one of those for scale derivation purposes because the Pearson product-moment correlation between those two items was only .07, thus indicating that any scale derived would have an alpha approaching zero. Nevertheless, the appearance of these two items together on the same factor, however tenuously, suggests an interesting hypothesis about the dynamics of competition in these situations. Perhaps we could suggest that while modest amounts of competition may be healthy, intense competition could become dysfunctional, resulting in the drill sergeants competing amongst themselves to the detriment of the training.

More complex factor solutions basically resulted in single items loading on each additional factor. The first two factors picked up 13 of the 16 items with loadings above .42. The remaining three items were the two just discussed in terms of the third factor, and the item:

- Drill sergeants don't let female trainees get out of doing things just because they are female.

Drill Sergeants Trained Under the Old Self-Paced POI (First Listed)

There were 788 cases in which a trainee described a drill sergeant trained in the old self-paced POI as the first drill sergeant. The six-factor solution yielded a fairly good and interpretable factor structure (see Table 23). The first principal axis factor in this data set accounted for 24.5 percent of the variance. This was followed by an extremely sharp drop-off in percent of variance accounted for, with the next five factors accounting for 4.6, 4.0, 3.6, 3.2, and 2.7 percent of the variance, respectively. The precipitous drop in the amount of variance accounted for repeats the pattern described in previous chapters for items describing an individual.

TABLE 23

SOLDIER'S QUESTIONNAIRE: VARIMAX ROTATED FACTOR MATRIX OF ITEMS
OF FIRST LISTED DRILL SERGEANT TRAINED IN THE SELF-PACED POI

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4
1	.000	.000	.000	.000
2	.000	.000	.000	.000
3	.000	.000	.000	.000
4	.000	.000	.000	.000
5	.000	.000	.000	.000
6	.000	.000	.000	.000
7	.000	.000	.000	.000
8	.000	.000	.000	.000
9	.000	.000	.000	.000
10	.000	.000	.000	.000
11	.000	.000	.000	.000
12	.000	.000	.000	.000
13	.000	.000	.000	.000
14	.000	.000	.000	.000
15	.000	.000	.000	.000
16	.000	.000	.000	.000
17	.000	.000	.000	.000
18	.000	.000	.000	.000
19	.000	.000	.000	.000
20	.000	.000	.000	.000
21	.000	.000	.000	.000
22	.000	.000	.000	.000
23	.000	.000	.000	.000
24	.000	.000	.000	.000
25	.000	.000	.000	.000
26	.000	.000	.000	.000
27	.000	.000	.000	.000
28	.000	.000	.000	.000
29	.000	.000	.000	.000
30	.000	.000	.000	.000
31	.000	.000	.000	.000
32	.000	.000	.000	.000
33	.000	.000	.000	.000
34	.000	.000	.000	.000
35	.000	.000	.000	.000
36	.000	.000	.000	.000
37	.000	.000	.000	.000
38	.000	.000	.000	.000
39	.000	.000	.000	.000
40	.000	.000	.000	.000
41	.000	.000	.000	.000
42	.000	.000	.000	.000
43	.000	.000	.000	.000
44	.000	.000	.000	.000
45	.000	.000	.000	.000
46	.000	.000	.000	.000
47	.000	.000	.000	.000
48	.000	.000	.000	.000
49	.000	.000	.000	.000
50	.000	.000	.000	.000
51	.000	.000	.000	.000
52	.000	.000	.000	.000
53	.000	.000	.000	.000
54	.000	.000	.000	.000
55	.000	.000	.000	.000
56	.000	.000	.000	.000
57	.000	.000	.000	.000
58	.000	.000	.000	.000
59	.000	.000	.000	.000
60	.000	.000	.000	.000
61	.000	.000	.000	.000
62	.000	.000	.000	.000
63	.000	.000	.000	.000
64	.000	.000	.000	.000
65	.000	.000	.000	.000
66	.000	.000	.000	.000
67	.000	.000	.000	.000
68	.000	.000	.000	.000
69	.000	.000	.000	.000
70	.000	.000	.000	.000
71	.000	.000	.000	.000
72	.000	.000	.000	.000
73	.000	.000	.000	.000
74	.000	.000	.000	.000
75	.000	.000	.000	.000
76	.000	.000	.000	.000
77	.000	.000	.000	.000
78	.000	.000	.000	.000
79	.000	.000	.000	.000
80	.000	.000	.000	.000
81	.000	.000	.000	.000
82	.000	.000	.000	.000
83	.000	.000	.000	.000
84	.000	.000	.000	.000
85	.000	.000	.000	.000
86	.000	.000	.000	.000
87	.000	.000	.000	.000
88	.000	.000	.000	.000
89	.000	.000	.000	.000
90	.000	.000	.000	.000
91	.000	.000	.000	.000
92	.000	.000	.000	.000
93	.000	.000	.000	.000
94	.000	.000	.000	.000
95	.000	.000	.000	.000
96	.000	.000	.000	.000
97	.000	.000	.000	.000
98	.000	.000	.000	.000
99	.000	.000	.000	.000
100	.000	.000	.000	.000

TABLE 23 (CONTINUED)

	FACTOR 5	FACTOR 6
1	.08602	.22547
2	.07296	.13129
3	.25076	.07632
4	.11977	.25076
5	.00184	.00900
6	.11111	.00000
7	.11111	.00000
8	.11111	.00000
9	.11111	.00000
10	.11111	.00000
11	.11111	.00000
12	.11111	.00000
13	.11111	.00000
14	.11111	.00000
15	.11111	.00000
16	.11111	.00000
17	.11111	.00000
18	.11111	.00000
19	.11111	.00000
20	.11111	.00000
21	.11111	.00000
22	.11111	.00000
23	.11111	.00000
24	.11111	.00000
25	.11111	.00000
26	.11111	.00000
27	.11111	.00000
28	.11111	.00000
29	.11111	.00000
30	.11111	.00000
31	.11111	.00000
32	.11111	.00000
33	.11111	.00000
34	.11111	.00000
35	.11111	.00000
36	.11111	.00000
37	.11111	.00000
38	.11111	.00000
39	.11111	.00000
40	.11111	.00000
41	.11111	.00000
42	.11111	.00000
43	.11111	.00000
44	.11111	.00000
45	.11111	.00000
46	.11111	.00000
47	.11111	.00000
48	.11111	.00000
49	.11111	.00000
50	.11111	.00000
51	.11111	.00000
52	.11111	.00000
53	.11111	.00000
54	.11111	.00000
55	.11111	.00000
56	.11111	.00000
57	.11111	.00000
58	.11111	.00000
59	.11111	.00000
60	.11111	.00000
61	.11111	.00000
62	.11111	.00000
63	.11111	.00000
64	.11111	.00000
65	.11111	.00000
66	.11111	.00000
67	.11111	.00000
68	.11111	.00000
69	.11111	.00000
70	.11111	.00000
71	.11111	.00000
72	.11111	.00000
73	.11111	.00000
74	.11111	.00000
75	.11111	.00000
76	.11111	.00000
77	.11111	.00000
78	.11111	.00000
79	.11111	.00000
80	.11111	.00000
81	.11111	.00000
82	.11111	.00000
83	.11111	.00000
84	.11111	.00000
85	.11111	.00000
86	.11111	.00000
87	.11111	.00000
88	.11111	.00000
89	.11111	.00000
90	.11111	.00000
91	.11111	.00000
92	.11111	.00000
93	.11111	.00000
94	.11111	.00000
95	.11111	.00000
96	.11111	.00000
97	.11111	.00000
98	.11111	.00000
99	.11111	.00000
100	.11111	.00000

Factor one was an overall evaluative description of the drill sergeant as an all-around, concerned, competent, soldier and leader. Ten of the 62 items entered onto this factor with loadings in excess of .60. Eleven additional items loaded between .40 and .60. The four highest loading items on this factor were:

- When I went to my drill sergeant for help, he listened well and cared about what I said (.76).
- When I had a problem, I went to my drill sergeant to talk things out (.70).
- When a trainee performed tasks well, the drill sergeant let him know about it (.70).
- My drill sergeant helped me to solve my problems (.69).

These items basically deal with a sensitive, aware individual who is able and willing to listen to trainee problems. Additional high-loading items included:

- My drill sergeant made me feel like a winner when I did something well (.61).
- When I finished a task, my drill sergeant told me how well I did (.64).
- Our drill sergeant kept us informed about how well he thought we were doing in training (.60).
- When my drill sergeant rewarded me for good performance, he gave a reward that meant something to me (.62).
- When I wanted to talk to my drill sergeant, he made himself available (.64).
- Whenever my drill sergeant referred a trainee to a helping agency, he followed up by checking to see that the agency did some good (.65).

Note that most of these items deal with positive feedback and a concern for making sure that the trainee succeeded.

Items loading in the .50's and high .40's included:

- When I didn't know exactly what my drill sergeant wanted me to do, he would spend the time explaining and showing me how he wanted it done (.52).

- When we received a new requirement or mission, the drill sergeant made sure we understood the reason for it (.49).
- When we asked our drill sergeant for help in solving a problem, he helped out (.58).
- Before my drill sergeant punished someone, he made sure he knew all the facts, the whole story (.58).
- When my drill sergeant determined that a trainee had a serious problem, he referred the trainee to a helping agency (.53).
- I tried out the things my drill sergeant told me to do after he advised me about some problems (.56).
- Our drill sergeant tried to scare us into doing what he wanted (-.50).

Factor two described the clarity of the expectations and instructions of the drill sergeant. The factor consisted primarily of six highly similar items that varied only in the words "what," "when," "where," and "how well." The items were included in this form on the assumption that because of the training in the new POI, it might be possible for trainees to distinguish among the various components of this type of communication. It is fairly clear that this fine a discrimination was not very well made by the trainees (or by members of the cadre, for that matter), and there was a tendency for all of the items to load together. The seven items loading above .4 were as follows:

- Whenever we got ready to perform a new task for the first time, the drill sergeant made sure we understood what he wanted us to do (.79).
- Whenever we got ready to perform a new task for the first time, the drill sergeant made sure we understood when we had to do it (.80).
- Whenever we got ready to perform a new task for the first time, the drill sergeant made sure we understood where we had to do it (.79).
- Whenever we got ready to perform a new task for the first time, the drill sergeant made sure we understood how well we had to do it (.69).
- Whenever we got ready to perform a new task for the first time, the drill sergeant made sure we understood what would happen to us if we did it right (.49).

- Whenever we got ready to perform a new task for the first time, the drill sergeant made sure we understood how we had to do it (.74).
- When we received a new requirement or mission, the drill sergeant made sure we understood the reason for it (.45).

This last item also appeared on *factor one* with a loading of .49.

Factor three encompasses the concepts of fairness and overall competence. Nine items appeared on this factor with a loading of .4 or above. The most important items were:

- My drill sergeant was always on my back (-.58).
- My drill sergeant picked on me (-.56).
- My drill sergeant's personal appearance was squared away (.52).
- My drill sergeant was in excellent physical condition (.50).
- My drill sergeant treated me the same as he treated everyone else (.59).
- Overall, my drill sergeant did a very good job (.59).

Also loading on this factor were:

- Our drill sergeant is such a good soldier, he could show us how to best perform our tasks (.44).
- My drill sergeant did not treat us very badly or abuse us (.44).
- Punishments my drill sergeant gave seemed to be fair (.47).

Factor four was a good soldier or expert soldier factor. This factor consisted primarily of the four items in another specially constructed set of questions that asked about specific areas of expertise the drill sergeant was expected to train. The extremely high loadings for all four areas of expertise indicated little, if any, differentiation among them by the trainees. The items and loadings were as follows:

- My drill sergeant showed us he was an expert in basic rifle marksmanship (.73).
- My drill sergeant showed us he was an expert in first aid (.73).

- My drill sergeant showed us he was an expert in military customs and courtesies (.71).
- My drill sergeant showed us he was an expert in physical readiness training (.71).

Also confirming the meaningfulness of this factor was the presence of two other items:

- Our drill sergeant is such a good soldier, he could show us how to best perform our tasks (.42).
- My drill sergeant was in excellent physical condition (.41).

Both of these items also loaded on the preceding factor.

Factor five can be defined as a general quality of training factor. the two highest loading items were:

- Our unit permits female trainees to graduate even when they have failed to perform to standards on performance tests (.61).
- Our unit permits male trainees to graduate even when they have failed to perform to standards on performance tests (.60).

Four additional items loading on this factor were:

- My drill sergeant had to work such long hours he looked too tired to train us (.42).
- When my drill sergeant was told about a touchy or embarrassing problem, he tried to side-step the issue instead of facing it head-on (.50).
- My drill sergeant got along well with other drill sergeants (-.42).
- My drill sergeant was very concerned with our scores on BR11, end-of-cycle tests, etc. (-.44).

On this factor we see a combination of items dealing with concern for and maintenance of standards for both males and females, as well as the drill sergeant's ability to get along with his peers and perform his duties adequately.

Factor six was basically a "fairness of punishment" factor, with all items dealing with punishment in one form or another. Six items loaded on this factor with loadings of .4 or more. They were:

- Our drill sergeant checked trainees with bad attitudes a lot more often than he checked the other trainees (.44).
- If you don't do what you're supposed to, the whole unit may be punished for it (.43).
- When a trainee did something wrong or performed a task poorly, the drill sergeant personally let him know about it (.56).
- When a trainee broke down and cried, the drill sergeant didn't holler or make fun of him (.40).
- My drill sergeant did not punish a trainee for poor performance unless the trainee was no longer trying to perform (.40).
- When my drill sergeant warned a trainee about something, he followed through with punishment, if the trainee's performance did not improve (.50).

Notice that the items can be interpreted as conveying the idea of fairness and consistency of punishment, or lack of it. It is interesting to note that the item "punishments my drill sergeant gave seemed to be fair" did not load on this factor, but did load on *factor one* and *factor three*. Similarly, the item "before my drill sergeant punished someone, he made sure he knew all the facts" did not load on this factor, but did appear on *factor one*.

Nine of the 62 items did not load on any of the six factors with a loading of .4 or above. Several of these items had been included to assess specific behaviors trained in the new POI. An example of this was the item "my drill sergeant had trouble working with members of the opposite sex," and "whenever our platoon marched in formation, short people were in the front."

Drill Sergeants Trained Under the New Eight-Week POI (First Listed)

The analyses of the drill sergeants who were trained under the new eight-week POI, and who were listed first in the questionnaire, involved an *n* of 400. The first principal axis factor accounted for 25.6 percent of the variance, while the second accounted for 5.2 percent.

A five-factor varimax rotated solution was chosen as the best for the data set, and is presented in Table 24. This is in contrast to the previously described six-factor solution chosen for descriptions of drill sergeants trained in the old self-paced POI. The following paragraphs will not only provide descriptions of the factors as they emerged in the current data set, but will also contain comments on the similarities and dissimilarities to that characteristic of the drill sergeants trained in the self-paced POI. In noting differences between the two factor structures, it is important to keep in mind an important area of colinearity. That is, the drill sergeants trained in the new eight-week POI are, by definition, less experienced than those trained in the previous self-paced POI. This correlation occurs simply because the new POI is more recent and completely replaced the old POI. Since there is a fair amount of overlap in the two programs during the year-long phasing-in period for the new POI, it may be possible to co-vary experience for a subsample of drill sergeants who graduated during the year in which the old POI was being replaced by the new POI. This analysis would be appropriate in the Evaluation Technical Report.

Factor one is an all-around evaluative factor concerned with the competence and leadership of the drill sergeant. It is highly similar to the first factor emerging in the descriptions of drill sergeants trained under the old self-paced POI. As might be expected, the size of the factor loadings bounced around somewhat, but the content of the factor remains surprisingly stable. The main change in this sample occurs in the fact that several items which obtained a loading of .4 on the current factor did not load at this level on the corresponding factor in the other set. Most of these items did, however, load between .3 and .4 in the original factor structure. For the sake of brevity, items that are common to both factors will not be repeated here. The reader is referred to the description of the drill sergeants trained in the self-paced POI. In addition, it is possible to directly compare the two factor structures by examining the appropriate tables. Here, items that appeared on this factor, but not on the others will be listed. Additional items were:

TABLE 24

SOLDIER'S QUESTIONNAIRE: VARIMAX ROTATED FACTOR MATRIX OF ITEMS
OF FIRST LISTED DRILL SERGEANT TRAINED IN THE 8-WEEK POI

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5
051	.07957	.05372	.04830	-.59584	-.00208
052	.05859	-.05495	.11445	-.00119	.20334
053	-.42308	-.15348	.34467	-.13023	.13072
054	.02218	.10294	-.01224	-.05379	.13231
055	.13079	.12706	-.14718	-.58853	.01801
056	.12315	.08818	.35355	-.12791	.02857
057	.00946	.09677	.04316	-.00097	.17450
058	.32280	.18564	.06399	.06902	.24596
059	.58597	.15452	.29259	.24132	.04599
060	.33738	.21247	.69014	.05177	.04245
061	.00251	.19214	.70687	.00046	.08473
062	.22068	.13667	.70275	.00092	.00347
063	.11111	.17393	.69771	.00047	.00666
064	.11111	.01627	.51355	.00037	.00396
065	.11111	.14115	.29344	.27961	.00298
066	.11111	.23392	.37992	.13135	.23108
067	.11111	.00364	.14169	.22555	.00210
068	.11111	.21303	.33367	.22022	.14650
069	.11111	.00594	.04467	.22009	.00028
070	.11111	.12048	.06244	.22009	.00028
071	.11111	.00000	.12033	.22009	.00028
072	.11111	.00000	.12033	.22009	.00028
073	.11111	.00000	.12033	.22009	.00028
074	.11111	.00000	.12033	.22009	.00028
075	.11111	.00000	.12033	.22009	.00028
076	.11111	.00000	.12033	.22009	.00028
077	.11111	.00000	.12033	.22009	.00028
078	.11111	.00000	.12033	.22009	.00028
079	.11111	.00000	.12033	.22009	.00028
080	.11111	.00000	.12033	.22009	.00028
081	.11111	.00000	.12033	.22009	.00028
082	.11111	.00000	.12033	.22009	.00028
083	.11111	.00000	.12033	.22009	.00028
084	.11111	.00000	.12033	.22009	.00028
085	.11111	.00000	.12033	.22009	.00028
086	.11111	.00000	.12033	.22009	.00028
087	.11111	.00000	.12033	.22009	.00028
088	.11111	.00000	.12033	.22009	.00028
089	.11111	.00000	.12033	.22009	.00028
090	.11111	.00000	.12033	.22009	.00028
091	.11111	.00000	.12033	.22009	.00028
092	.11111	.00000	.12033	.22009	.00028
093	.11111	.00000	.12033	.22009	.00028
094	.11111	.00000	.12033	.22009	.00028
095	.11111	.00000	.12033	.22009	.00028
096	.11111	.00000	.12033	.22009	.00028
097	.11111	.00000	.12033	.22009	.00028
098	.11111	.00000	.12033	.22009	.00028
099	.11111	.00000	.12033	.22009	.00028
100	.11111	.00000	.12033	.22009	.00028
101	.11111	.00000	.12033	.22009	.00028
102	.11111	.00000	.12033	.22009	.00028
103	.11111	.00000	.12033	.22009	.00028
104	.11111	.00000	.12033	.22009	.00028
105	.11111	.00000	.12033	.22009	.00028
106	.11111	.00000	.12033	.22009	.00028
107	.11111	.00000	.12033	.22009	.00028
108	.11111	.00000	.12033	.22009	.00028
109	.11111	.00000	.12033	.22009	.00028
110	.11111	.00000	.12033	.22009	.00028
111	.11111	.00000	.12033	.22009	.00028
112	.11111	.00000	.12033	.22009	.00028
113	.11111	.00000	.12033	.22009	.00028
114	.11111	.00000	.12033	.22009	.00028
115	.11111	.00000	.12033	.22009	.00028
116	.11111	.00000	.12033	.22009	.00028
117	.11111	.00000	.12033	.22009	.00028
118	.11111	.00000	.12033	.22009	.00028
119	.11111	.00000	.12033	.22009	.00028
120	.11111	.00000	.12033	.22009	.00028
121	.11111	.00000	.12033	.22009	.00028
122	.11111	.00000	.12033	.22009	.00028
123	.11111	.00000	.12033	.22009	.00028
124	.11111	.00000	.12033	.22009	.00028
125	.11111	.00000	.12033	.22009	.00028
126	.11111	.00000	.12033	.22009	.00028
127	.11111	.00000	.12033	.22009	.00028
128	.11111	.00000	.12033	.22009	.00028
129	.11111	.00000	.12033	.22009	.00028
130	.11111	.00000	.12033	.22009	.00028
131	.11111	.00000	.12033	.22009	.00028
132	.11111	.00000	.12033	.22009	.00028
133	.11111	.00000	.12033	.22009	.00028
134	.11111	.00000	.12033	.22009	.00028
135	.11111	.00000	.12033	.22009	.00028
136	.11111	.00000	.12033	.22009	.00028
137	.11111	.00000	.12033	.22009	.00028
138	.11111	.00000	.12033	.22009	.00028
139	.11111	.00000	.12033	.22009	.00028
140	.11111	.00000	.12033	.22009	.00028
141	.11111	.00000	.12033	.22009	.00028
142	.11111	.00000	.12033	.22009	.00028
143	.11111	.00000	.12033	.22009	.00028
144	.11111	.00000	.12033	.22009	.00028
145	.11111	.00000	.12033	.22009	.00028
146	.11111	.00000	.12033	.22009	.00028
147	.11111	.00000	.12033	.22009	.00028
148	.11111	.00000	.12033	.22009	.00028
149	.11111	.00000	.12033	.22009	.00028
150	.11111	.00000	.12033	.22009	.00028
151	.11111	.00000	.12033	.22009	.00028

- My drill sergeant treated me the same as he treated everyone else (-.48).
- Overall, my drill sergeant did a very good job (-.53).
- Our drill sergeant checked us to make sure we performed each task the way he wanted it done (.44).
- Our drill sergeant seemed to rate us by how well we performed in training--not other things like personality, race, or sex (.50).

Factor two concerned the clarity of instructions and expectations of the drill sergeant, and corresponds to *factor two* of the descriptions of drill sergeants trained under the old self-paced POI. Again, the factor structure was extremely similar, although two additional items achieved a .4 or above loading in this data set. They are:

- When we received a new requirement or mission, the drill sergeant made sure that we understood the reason for it (.49).
- When we asked our drill sergeant for help in solving a problem, he helped out (.42).

Both of these items also cross loaded on *factor one*. The other items are described in the section describing drill sergeants trained under the old self-paced POI.

Factor three deals with the expertise of the drill sergeant and might be considered a "good soldier" factor. This factor corresponds to *factor four* in the previously mentioned factor structure. Here, the factor simplified somewhat from that previously found. Items loading here were:

- My drill sergeant showed us he was an expert in basic rifle marksmanship (.69).
- My drill sergeant showed us he was an expert in first aid (.71).
- My drill sergeant showed us he was an expert in military customs and courtesies (.71).
- My drill sergeant showed us he was an expert in physical readiness training (.73).

- My drill sergeant made both male and female trainees meet the required standards in order to graduate (.51).

This item did not load on the equivalent factor for drill sergeants trained in the self-paced POI. In addition, two items that had loaded marginally on the previous factor, did not meet the criteria set here:

- Our drill sergeant is such a good soldier, he could best show us how to perform our tasks (.34).
- My drill sergeant was in excellent physical condition (.38).

Factor four is the fairness factor and corresponds roughly to *factor three* of the data set for drill sergeants trained in the self-paced POI. However, it does not contain the competence implications found in the other data set. Items loading here were:

- My drill sergeant was always on my back (-.60).
- Our drill sergeant made work just to keep us busy when we didn't have anything important to do (-.54).
- My drill sergeant picked on me (-.59).
- I tried out the things my drill sergeant told me to do after he advised me about some problems (.50).

This later item did not load on the corresponding fairness and competence factor for drill sergeants trained in the old POI.

Factor five is a somewhat diffuse factor dealing primarily with the ability of the drill sergeant to cope with touchy issues. The two highest loading items are those dealing with whether or not the trainees were allowed to graduate when they were not qualified to do so. The four items loading here were:

- Our unit permits male trainees to graduate even when they have failed to perform to standards on performance tests (.58).
- Our unit permits female trainees to graduate even when they have failed to perform to standards on performance tests (.60).

- When my drill sergeant warned a trainee about something, he followed through with punishment if the trainees performance did not improve (-.48).
- My drill sergeant had to work such long hours he looked too tired to train us (.42).

In passing, it should be noted that there are certain similarities between this factor and the factor labeled "general competence" in the data set describing drill sergeants trained in the old self-paced POI.

The punishment factor which appeared in the data set for self-paced trained drill sergeants did not appear in the factor analyses for drill sergeants trained in the new eight-week POI. Actually, a punishment factor somewhat similar to that found for drill sergeants trained in the old POI, did emerge in the nine factor rotated solution, as the eighth factor. However, since several of the other factors that emerged in that solution were so minor, involved only one or two modestly loading items, and were difficult to interpret, it was decided against using that solution.

Second Listed Drill Sergeants

The formatting of the soldier's questionnaire required the soldier responding to describe two different drill sergeants. The factor analyses described above are based on the descriptions for the first drill sergeant described by the trainee. Because of the requirement for a second description, it is possible to obtain a measure of the stability of the factor structure reported for the first listed drill sergeants. In general, we would expect the previously described factor structures to be more representative and more stable than those found for the second listed drill sergeant. There are several reasons for this expectation. First of all, the sample sizes were expected to be somewhat smaller for the second listed drill sergeants, because a number of trainees only described one drill sergeant, leaving the second section blank. In addition, we expected that the trainees would tend to use the first section to describe the drill sergeant they were most familiar with. The second section probably got a somewhat less familiar drill sergeant. Third, fatigue and boredom in filling out the questionnaire, a problem

common to any lengthy questionnaire in any setting, undoubtedly would have been setting in at about this point, and so the responses are probably more careless and hasty. Nevertheless, or perhaps because of these probable factors, it should be informative to compare the two sets of factor structures.

Drill Sergeants Trained in the New Eight-Week POI (Second Listed)

The n for this sample was 507, in contrast to an n of 400 for the first listed drill sergeant trained under the eight-week POI. Thus, our expectation that the n would be smaller here was incorrect. This unexpected reversal is probably due to the fact that drill sergeants in the eight-week POI are less experienced and less senior, therefore, are less likely to have direct responsibility for the control of the trainees. In other words, they are more likely to be assistant platoon leaders.

The amount of variance controlled by the first principal axis factor was 27.5 percent of the variance which is a slight increase over the 25.6 percent of the variance controlled by the same factor in the first listed new-POI data set. This suggests a slight simplification process going on in the response set of the trainees. This suspicion is further confirmed by the fact that the four-factor solution was deemed to be best, in contrast to the five and six factor solutions for the drill sergeants when described first in the questionnaire. Furthermore, when the four-factor solution for the first listed drill sergeants trained under the eight-week POI is compared to the one being described here, there is a great deal of similarity. As a result of these findings, our recommendation will be to treat only the first four factors as being stable enough to use in a serious evaluation effort. The four-factor solution is described in the paragraphs below, and the complete listing of factor loadings is presented in Table 25. In addition, the corresponding four-factor solution for the first listed drill sergeant trained in the new POI is presented in Table 26 for comparison purposes. However, only minimal reference will be made to it in the text.

Factor one is called "the clarity of goals and results" factor. Items loading on this factor included:

TABLE 25

SOLDIER'S QUESTIONNAIRE: VARIMAX ROTATED FACTOR MATRIX OF ITEMS
OF SECOND LISTED DRILL SERGEANT TRAINED IN THE 8-WEEK POI

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4
DS101	.086224	-.03561	.27879	-.61478
DS102	-.074228	-.211116	.10281	-.33799
DS103	-.18915	.61790	-.22765	-.19618
DS104	-.06986	-.14615	.20875	-.41493
DS105	-.10212	-.10668	.31232	-.66824
DS106	-.084307	-.11668	.01456	-.04407
DS107	-.084307	-.000514	.22130	.00290
DS108	-.13317	-.264247	.33169	.15503
DS109	-.13317	-.264247	.33169	.15503
DS110	-.13317	-.264247	.33169	.15503
DS111	-.13317	-.264247	.33169	.15503
DS112	-.13317	-.264247	.33169	.15503
DS113	-.13317	-.264247	.33169	.15503
DS114	-.13317	-.264247	.33169	.15503
DS115	-.13317	-.264247	.33169	.15503
DS116	-.13317	-.264247	.33169	.15503
DS117	-.13317	-.264247	.33169	.15503
DS118	-.13317	-.264247	.33169	.15503
DS119	-.13317	-.264247	.33169	.15503
DS120	-.13317	-.264247	.33169	.15503
DS121	-.13317	-.264247	.33169	.15503
DS122	-.13317	-.264247	.33169	.15503
DS123	-.13317	-.264247	.33169	.15503
DS124	-.13317	-.264247	.33169	.15503
DS125	-.13317	-.264247	.33169	.15503
DS126	-.13317	-.264247	.33169	.15503
DS127	-.13317	-.264247	.33169	.15503
DS128	-.13317	-.264247	.33169	.15503
DS129	-.13317	-.264247	.33169	.15503
DS130	-.13317	-.264247	.33169	.15503
DS131	-.13317	-.264247	.33169	.15503
DS132	-.13317	-.264247	.33169	.15503
DS133	-.13317	-.264247	.33169	.15503
DS134	-.13317	-.264247	.33169	.15503
DS135	-.13317	-.264247	.33169	.15503
DS136	-.13317	-.264247	.33169	.15503
DS137	-.13317	-.264247	.33169	.15503
DS138	-.13317	-.264247	.33169	.15503
DS139	-.13317	-.264247	.33169	.15503
DS140	-.13317	-.264247	.33169	.15503
DS141	-.13317	-.264247	.33169	.15503
DS142	-.13317	-.264247	.33169	.15503
DS143	-.13317	-.264247	.33169	.15503
DS144	-.13317	-.264247	.33169	.15503
DS145	-.13317	-.264247	.33169	.15503
DS146	-.13317	-.264247	.33169	.15503
DS147	-.13317	-.264247	.33169	.15503
DS148	-.13317	-.264247	.33169	.15503
DS149	-.13317	-.264247	.33169	.15503
DS150	-.13317	-.264247	.33169	.15503
DS151	-.13317	-.264247	.33169	.15503
DS152	-.13317	-.264247	.33169	.15503
DS153	-.13317	-.264247	.33169	.15503
DS154	-.13317	-.264247	.33169	.15503
DS155	-.13317	-.264247	.33169	.15503
DS156	-.13317	-.264247	.33169	.15503
DS157	-.13317	-.264247	.33169	.15503
DS158	-.13317	-.264247	.33169	.15503
DS159	-.13317	-.264247	.33169	.15503
DS160	-.13317	-.264247	.33169	.15503
DS161	-.13317	-.264247	.33169	.15503
DS162	-.13317	-.264247	.33169	.15503

TABLE 26

SOLDIER'S QUESTIONNAIRE: VARIMAX ROTATED FACTOR MATRIX OF ITEMS
OF FIRST LISTED DRILL SERGEANT TRAINED IN THE 8-WEEK POI

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4
JS1	.03559	.03525	.04521	-.56522
JS2	.06920	-.10585	.18567	.03440
JS3	.43592	-.16754	.33374	.15144
JS4	.06936	.04205	.05010	-.45661
JS5	.11453	.09312	-.11771	-.52526
JS6	-.16361	.08873	.33419	-.14326
JS7	-.06818	-.14574	.01967	.05781
JS8	-.27401	-.23503	.13131	.43670
JS9	-.59394	-.14373	.24439	.25532
JS10	-.43122	-.14606	.55435	-.05071
JS11	-.42574	-.12883	.57335	.10394
JS12	-.30805	-.09939	.61345	-.08202
JS13	-.28427	-.16742	.67884	-.13502
JS14	-.11549	-.05031	.59189	.11633
JS15	-.06922	-.20085	.37725	.31073
JS16	-.22283	-.29243	.42027	.15405
JS17	-.42572	-.11523	.23402	.35053
JS18	.53165	-.22821	.30319	.30963
JS19	.03025	-.39543	-.33333	-.17893
JS20	.32062	.33210	-.07451	.35074
JS21	.35784	-.28338	.16287	.45445
JS22	.72320	-.77120	.04045	.25475
JS23	-.23795	-.05915	.21464	.12826
JS24	.31041	.45750	-.07939	.07494
JS25	.31437	.74563	-.14413	.13846
JS26	.24165	.70283	-.18504	.01282
JS27	.11135	.73115	-.22602	.02767
JS28	.43785	.37875	-.19747	.07621
JS29	.27344	.77979	-.14440	.03420
JS30	.12144	-.38942	.11310	.15253
JS31	.60760	.45153	-.09121	.18815
JS32	.52333	.45410	-.16131	.00035
JS33	.60919	.42361	-.10914	.14692
JS34	.30275	.34337	-.22427	.40685
JS35	.66831	.39332	-.11245	.09551
JS36	.47270	.39343	-.22778	.24117
JS37	.12742	.11121	-.19273	.37263
JS38	-.12397	.17421	-.00447	.39382
JS39	.15735	.31047	-.07541	.25160
JS40	.63045	.35924	-.11613	.07220
JS41	.65737	.39332	-.27579	.05669
JS42	.49983	.39332	-.26223	.05844
JS43	.00951	.11513	.32550	.11713
JS44	.00272	.20662	.17237	.02420
JS45	.00131	.13239	.05540	.01640
JS46	.53097	.15733	-.11480	.21313
JS47	.59967	.36215	-.11746	.15430
JS48	.14558	.31403	-.13967	.04379
JS49	.27787	-.39004	-.22134	.32869
JS50	.54220	.22315	-.05729	.31140
JS51	.61795	.23545	-.08259	.23592
JS52	.66111	.10925	-.14241	.13934
JS53	.70701	.12679	-.15171	.18897
JS54	.67549	.30033	-.05334	.07229
JS55	.74040	.09003	-.00337	.25512
JS56	.16103	.02611	.26345	.50582
JS57	.48736	.02275	-.06847	.05772
JS58	.44016	.01813	.22533	.47211
JS59	.00348	.12203	.55822	.19328
JS60	.13353	.27443	.15332	.21875
JS61	.56059	.17249	-.31381	.01397
JS62	.41244	.19260	-.23000	.01367

- Whenever we got ready to perform a new task for the first time, the drill sergeant made sure we understood what he wanted us to do (.64).
- Whenever we got ready to perform a new task for the first time, the drill sergeant made sure we understood when we had to do it (.74).
- Whenever we got ready to perform a new task for the first time, the drill sergeant made sure we understood how well we had to do it (.74).
- Whenever we got ready to perform a new task for the first time, the drill sergeant made sure we understood what would happen to us if we did it right (.55).
- Whenever we got ready to perform a new task for the first time, the drill sergeant made sure we understood how we had to do it (.69).
- When I didn't know exactly what my drill sergeant wanted me to do, he would spend time explaining and showing me how he wanted it done (.47).
- When we received a new requirement or mission, the drill sergeant made sure we understood the reason for it (.56).
- When we asked our drill sergeant for help solving a problem, he helped out (.46).
- My drill sergeant's standards were reasonable--I knew I could meet all the standards if I worked at it (.47).
- When I finished a task, my drill sergeant told me how well I did (.41).
- Our drill sergeant checked us to make sure we performed each task the way he wanted it done (.64).
- My drill sergeant spent most of his time helping us prepare for tasks (.45).

Note the inclusion of monitoring and giving of feedback into this factor, as well as the clear definition of goals.

Factor two is the competence factor. Items loading here included:

- My drill sergeant showed us he was an expert in basic rifle marksmanship (.68).
- My drill sergeant showed us he was an expert in first aid (.72).

- My drill sergeant showed us he was an expert in military customs and courtesies (.78).
- My drill sergeant showed us he was an expert in physical readiness training (.78).
- My drill sergeant made both male and female trainees meet the required standards in order to graduate (.42).
- My drill sergeant's personal appearance was squared away (.44).
- My drill sergeant was in excellent physical condition (.58).
- Overall, my drill sergeant did a very good job (.44).

Factor three was the sensitivity factor, with a special emphasis on counseling skills. Items loading on this factor above .4 were:

- My drill sergeant made me feel like a winner when I did something well (.52).
- Punishments my drill sergeant gave seemed to be fair (-.46).
- My drill sergeant helped me to solve my problems (-.66).
- When I didn't know exactly what my drill sergeant wanted me to do, he would spend time explaining and showing me how he wanted it done (.51).
- When we received a new requirement or mission, my drill sergeant made sure we understood the reason for it (.41).
- When we asked our drill sergeant for help solving a problem, he helped out (.58).
- When I finished a task, my drill sergeant told me how well I did (.56).
- When a trainee performed a task well, my drill sergeant let him know about it (.61).
- Our drill sergeant kept us informed about how well he thought we were doing in training (.54).
- When my drill sergeant promised a trainee a reward, he followed through and made sure the trainee got it (.55).
- When my drill sergeant rewarded me for good performance he gave a reward that meant something to me (.64).

- Before my drill sergeant punished someone, he made sure that he knew all the facts--the whole story (.55).
- When I wanted to talk to my drill sergeant, he made himself available (.68).
- When my drill sergeant determined that a trainee had a serious problem, he referred a trainee to a helping agency (.63).
- Whenever my drill sergeant referred a trainee to a helping agency, he followed-up by checking to see that the agency did some good (.63).
- When I had a problem I went to my drill sergeant to talk things out (.70).
- When I went to my drill sergeant for help, he listened well and cared about what I said (.74).
- I tried out the things my drill sergeant told me to do after he advised me about some problems (.53).

Note again, that certain components dealing with reward and punishment also loaded on *factor one*. In general, we see a tendency, repeated several times, for the providing of feedback to be both a sign of consideration and sensitivity, as well as an indicator of quality of leadership and clarity of goals.

Factor four is a fairness and sensitivity factor, with several of the items dealing with punishment. It is a general stylistic appraisal of the way the drill sergeant dealt with individual trainees. Items loading here were:

- My drill sergeant was always on my back (.61).
- Our drill sergeant made work just to keep us busy when we didn't have anything important to do (.41).
- My drill sergeant picked on me (.69).
- My drill sergeant treated me the same as he treated everyone else (-.48).
- Overall, my drill sergeant did a very good job (-.44).

- My drill sergeant had trouble working with trainees of the opposite sex (.42).
- My drill sergeant showed favoritism for certain trainees in our unit (.50).
- When my drill sergeant was told about a touchy or embarrassing problem, he tried to side-step the issue instead of facing it head on (-.40).
- During counseling sessions, my drill sergeant ordered, threatened, criticized, or preached (-.58).
- Our drill sergeant tried to scare us into doing what he wanted (-.48).

In the corresponding four factor solutions for the first listed drill sergeant trained in the new eight-week POI, the following major differences were noted. In comparing the factor structures for the first and second listed drill sergeants, when both were trained in the new POI, it appears that the biggest difference in the two factor structures is in the order in which the factors appeared. Factors one, two, three, and four in the second listed drill sergeant set emerged in the order three, one, two, and four in the first listed set. Items loading in the 30's and 40's were (not surprisingly) less stable than higher loading items.

Drill Sergeants Trained in the Self-Paced POI (Second Listed)

This set of analyses was based on a n of 731 observations. The first principal axis factor accounted for 30.6 percent of the variance with the usual precipitious drop-off in variance accounted for by subsequent factors.

The first factor is the consideration/sensitivity/counseling factor, while the second factor is the goal clarity factor. The third factor is the military competence factor and the fourth factor is the punitiveness factor. Since the loadings result in a highly similar set of items to those previously described for the drill sergeants trained in the new eight-week POI, a listing of the items will not be presented here. Instead, the reader is referred to the description

presented elsewhere, and to Table 27 which presents the complete factor loadings for this data set, as well as to Table 28 which presents the four-factor solution for the first listed drill sergeants trained in the old self-paced POI.

To briefly summarize the results of our informal "cross-validation," we have four fairly reliable factors common to drill sergeants trained under two different programs of instruction and with somewhat different degrees of contact with trainees. Beyond four factors, however, the stability of the results becomes highly suspect.

TABLE 27

SOLDIER'S QUESTIONNAIRE: VARIMAX ROTATED FACTOR MATRIX OF ITEMS
OF SECOND LISTED DRILL SERGEANT TRAINED IN THE SELF-PACED POI

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4
DS101	.30263	.07079	.00653	.41285
DS102	.12132	.10761	.07035	.02767
DS103	.12879	.20723	.44245	.23858
DS104	.16724	.11278	.04754	.42841
DS105	.39363	.21514	.10078	.45632
DS106	.00893	.23632	.25789	.14016
DS107	.12896	.17822	.15105	.00463
DS108	.37350	.13415	.23249	.22544
DS109	.54733	.00653	.36301	.22558
DS110	.51088	.12531	.70207	.00033
DS111	.33811	.14337	.72246	.00000
DS112	.23222	.16407	.75832	.00086
DS113	.19301	.16805	.80147	.00000
DS114	.06911	.08624	.52919	.10610
DS115	.70555	.25591	.50745	.12700
DS116	.15650	.21927	.64535	.19900
DS117	.34333	.21902	.37786	.46165
DS118	.12035	.28444	.42348	.08808
DS119	.14796	.17472	.22691	.20806
DS120	.23799	.13492	.14509	.20991
DS121	.23799	.11466	.16801	.20991
DS122	.36477	.00855	.23369	.20991
DS123	.33333	.00833	.22033	.20991
DS124	.33333	.00833	.22033	.20991
DS125	.33333	.00833	.22033	.20991
DS126	.33333	.00833	.22033	.20991
DS127	.33333	.00833	.22033	.20991
DS128	.33333	.00833	.22033	.20991
DS129	.33333	.00833	.22033	.20991
DS130	.33333	.00833	.22033	.20991
DS131	.33333	.00833	.22033	.20991
DS132	.33333	.00833	.22033	.20991
DS133	.33333	.00833	.22033	.20991
DS134	.33333	.00833	.22033	.20991
DS135	.33333	.00833	.22033	.20991
DS136	.33333	.00833	.22033	.20991
DS137	.33333	.00833	.22033	.20991
DS138	.33333	.00833	.22033	.20991
DS139	.33333	.00833	.22033	.20991
DS140	.33333	.00833	.22033	.20991
DS141	.33333	.00833	.22033	.20991
DS142	.33333	.00833	.22033	.20991
DS143	.33333	.00833	.22033	.20991
DS144	.33333	.00833	.22033	.20991
DS145	.33333	.00833	.22033	.20991
DS146	.33333	.00833	.22033	.20991
DS147	.33333	.00833	.22033	.20991
DS148	.33333	.00833	.22033	.20991
DS149	.33333	.00833	.22033	.20991
DS150	.33333	.00833	.22033	.20991
DS151	.33333	.00833	.22033	.20991
DS152	.33333	.00833	.22033	.20991
DS153	.33333	.00833	.22033	.20991
DS154	.33333	.00833	.22033	.20991
DS155	.33333	.00833	.22033	.20991
DS156	.33333	.00833	.22033	.20991
DS157	.33333	.00833	.22033	.20991
DS158	.33333	.00833	.22033	.20991
DS159	.33333	.00833	.22033	.20991
DS160	.33333	.00833	.22033	.20991
DS161	.33333	.00833	.22033	.20991
DS162	.33333	.00833	.22033	.20991

TABLE 28

SOLDIER'S QUESTIONNAIRE: VARIMAX ROTATED FACTOR MATRIX OF ITEMS
OF FIRST LISTED DRILL SERGEANT TRAINED IN SELF-PACED POI

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4
051	.287	.054	.378	.153
052	.135	.177	.220	.223
053	.186	.154	.220	.223
054	.157	.177	.220	.223
055	.162	.177	.220	.223
056	.162	.177	.220	.223
057	.162	.177	.220	.223
058	.162	.177	.220	.223
059	.162	.177	.220	.223
060	.162	.177	.220	.223
061	.162	.177	.220	.223
062	.162	.177	.220	.223
063	.162	.177	.220	.223
064	.162	.177	.220	.223
065	.162	.177	.220	.223
066	.162	.177	.220	.223
067	.162	.177	.220	.223
068	.162	.177	.220	.223
069	.162	.177	.220	.223
070	.162	.177	.220	.223
071	.162	.177	.220	.223
072	.162	.177	.220	.223
073	.162	.177	.220	.223
074	.162	.177	.220	.223
075	.162	.177	.220	.223
076	.162	.177	.220	.223
077	.162	.177	.220	.223
078	.162	.177	.220	.223
079	.162	.177	.220	.223
080	.162	.177	.220	.223
081	.162	.177	.220	.223
082	.162	.177	.220	.223
083	.162	.177	.220	.223
084	.162	.177	.220	.223
085	.162	.177	.220	.223
086	.162	.177	.220	.223
087	.162	.177	.220	.223
088	.162	.177	.220	.223
089	.162	.177	.220	.223
090	.162	.177	.220	.223
091	.162	.177	.220	.223
092	.162	.177	.220	.223
093	.162	.177	.220	.223
094	.162	.177	.220	.223
095	.162	.177	.220	.223
096	.162	.177	.220	.223
097	.162	.177	.220	.223
098	.162	.177	.220	.223
099	.162	.177	.220	.223
100	.162	.177	.220	.223

CHAPTER 6

PERFORMANCE AND ADMINISTRATIVE DATA

The Unit Performance and Administrative Data Form attempts to obtain information about the status of the unit that could be used as independent as well as dependent variables in assessing the actual effectiveness of the drill sergeants in carrying out their jobs. "Administrative data" refers to routinely maintained indicators of the unit's status and includes the number of trainees in the unit, the number of discharge actions initiated, article 15's administered, letters of discipline administered, number of sick calls, number of drill sergeants authorized as well as actually present, plus some basic information on the physical abilities performance tests of the trainees. The data set includes information on the status of the trainees, as well as the status of the cadre itself.

The detailed nature of the questionnaire, along with the importance of maintaining discrete indicators as separately identifiable criteria, as well as the extremely low variance on many items, resulted in the decision not to attempt to factor analyze this data set. Instead, this chapter will present a brief summary of some basic characteristics of the data. In particular, information regarding the base rate appearance of the indicator will be presented. As will be seen, in a number of instances there was no variance on the indicator, and in many other instances, there was very little variance. The chapter will end with a brief recommendation on the way to consolidate and simplify this particular form. The actual utility of the indicators in terms of linking them to the evaluation criteria remains to be seen.

Trainee Administrative Data

The range of responses on the first six items indicates that all could be used as indicators with enough variance to reflect

relationships with the independent variables, if such exist. Item number two, regarding how many trainees were in the cycle and actually graduated with their unit, appears to have been misunderstood by several respondents, since there were five forms with zeros filled in. With respect to the number of discharge actions initiated, there appears to be enough variation on each of the items to be potentially usable as a criterion. However, in most cases, the distributions are badly skewed toward responses of zero and one. The week-by-week break out may be too detailed, and unless there are specific reasons for keeping them separate, a more comprehensive and usable criterion may simply be a sum for the entire training cycle. A middle step might be to break the cycle into two or three periods and collect information for those periods rather than on a week-by-week basis.

The five items dealing with article 15's all appear to have a reasonable spread of responses and are probably usable as indicators. There is some tendency for a bunching up toward the "zero" and "one" end of the scale when the specific reasons for the article 15's are requested. If the preliminary evaluation research, to be reported in another technical report, does not show any real distinction or utility in breaking out the reasons for the article 15's then it would be recommended that they be combined or that these requests be eliminated and that only the overall number of article 15's be requested.

The letters of reprimand section required that letters of reprimand be recorded according to whether or not they were given by a field grade or a company grade officer. As it turned out, the base rate of letters of reprimand is so small that any break out of this type is almost meaningless. Only one letter of reprimand was given by a field grade officer in this entire sample. The overall low frequency of this type of punishment is such that the recommendation here is that the break-out by field and company grade be eliminated, and that the sections identifying the reason for the letter also

be eliminated for having too low a base rate. The only items that had satisfactory distribution of items for evaluation use really were item number 7, asking for the total number of letters; and item number 8, asking for the total number of trainees who received letters.

The item asking for the number of court martials for trainees suggests that the base rate is too low to be a useful indicator. In only 7 of 104 units one court martial was initiated. Items asking about AWOLs and IG complaints have sufficient, although not spectacular spread so as to provide reasonable variance for evaluation along that dimension.

All of the sick call items had a substantial amount of spread on them, and therefore had enough variance in them to be useful as an evaluation criterion. The real question is to what extent the break outs by injury, illness and sex will provide meaningful connections to the independent variables. Our recommendation here is to keep all of the indicators as is, unless the evaluation research shows them to be useless.

Non-Drill Sergeant Cadre Items

The base rates on the non-drill sergeant cadre items are so low as to make them almost useless. It is definitely an exercise in futility to break out the items by whether or not they were given by field grade or company grade officers. The break out by reasons for the administrative action also are not likely to provide any information not already provided in the general question requesting total numbers of a particular type of action. Half of the variation that does appear to exist appeared to be related to one or two units having a very special problem. For example, one unit out of 104 reported giving 61 article 15's to non-drill sergeant cadre. This does not even seem reasonable and may be an error in understanding of the question by the person filling it out. Our recommendation

for this section is to consolidate all of the items and break outs into six single-response questions requesting the following information:

- Total number of article 15's.
- Total individuals receiving article 15's.
- Total number of letters of reprimand.
- Total number of individuals receiving letters of reprimand.
- Total number of court martials.
- Total number of AWOLs.

Even with this condensation in responses, it is likely that there will be no variance on some of the items in any given period of time.

Drill Sergeant Items

The items dealing with drill sergeant's strength appeared to generally be adequate in terms of amount of variance in each item. It is not clear in scanning the data that the distinction between the first day of training and the last day of training is going to be very meaningful, and appears to have generated more than a little confusion. In particular, item five, "how many drill sergeants were administratively removed from the drill sergeant program during the cycle," seems very ambiguous in terms of first and last day. At the very least, only a single response should be required of this item. Again, in a few cases, there appeared to be some gross misunderstandings of the requirement of the item. For example, on the item requesting the number of drill sergeant designees, four units indicated that there were eight or more designees in the unit, indicating that the entire unit was made up of designees, an unlikely if not impossible circumstance.

The number of punitive administrative actions taken against drill sergeants again is so low that they may not be very useful as

indicators in the evaluation study. For example, a total of three article 15's were administered to drill sergeants in all of the 104 units in the survey. Similarly, only 11 letters of reprimand were administered throughout the survey. As a result, the elaborate break outs required in the form are really exercises in filling in zeros. They are unlikely to provide any information not already obtained in the general item requesting total numbers of a particular action. Therefore, the same recommendation made for non-drill sergeants cadre administrative items is being made for drill sergeant administrative items. That is, this section should be reduced to six single-response items requesting:

- Total number of article 15's.
- Number of individuals receiving article 15's.
- Total number of letters of reprimand.
- Number of individuals receiving letters of reprimand.
- Number of individuals court martialed.
- Number of individuals absent without leave.

Again, even with this reduction and simplification, it is likely that minimal useful variance will be available on these items in any given survey period.

One solution to the low variance situation on some of these items is to take the simplification process one step further. That is, to lump all punitive actions together into a single "punitive action" indicator. Thus, you might have an indicator entitled "drill sergeant punitive actions" which includes all article 15's, all letters of reprimand, and all court martials initiated. Items might be weighted by their seriousness. It should also be kept in mind, that in addition to the items actually present in the data form, several created criteria are probably very important to examine.

For example, the ratio of drill sergeants actually present to those authorized is probably a better indicator of unit strength than either of the items alone. Similarly, the relationship between trainee strength and drill sergeant strength should also be reflected in one of the indicators. The ratio of drill sergeant designees to total number of drill sergeants may also be an interesting criterion or independent variable depending on the nature of the evaluation analysis being conducted. In general, it is extremely important to make sure that some of these raw data numbers be cast into the proper context when being used in the evaluation.

Physical Training Indicators

The items indicating average unit performance on the PT tests indicate a reasonable enough spread to make them satisfactory as evaluation criteria. It will be necessary to keep in mind that the Army was switching from a 500 point to a 300 point scoring procedure. Some units were on the new procedure, while others were still on the old procedure. Scores will have to be adjusted accordingly using item number one on page 10. Unfortunately, five units did not indicate whether they were on the old or new scoring procedure. In addition, 35 units did not indicate any average score and therefore have missing data on this indicator.

Summary

The performance and administrative data, on the whole, look reasonably adequate to serve as criteria in the evaluation portion of the study. As indicated in the text above, the base rates on some of the administrative items, primarily in terms of unit cadre rather than trainees, indicate a need to substantially simplify the data reporting procedure. Implementing the recommendations made here will probably improve the quality of the data, and certainly will improve the acceptability of the forms to the individuals having to fill it out.

CHAPTER 7

DISCUSSION AND RECOMMENDATIONS

The results of the factor analyses presented in the previous chapters are encouraging in the sense that a number of meaningful factors emerged. In addition, a number of factors tended to reappear in different item sets across questionnaires, thereby raising the possibility of a conceptual consistency in interpretations from the various perspectives represented by the different questionnaires. Unfortunately, the emergence of these repeating themes did not occur as extensively or as cleanly as one might have hoped.

A somewhat discouraging result of these analyses emerges in the probability that only a small number of items can be recommended for elimination from the questionnaires on the basis of these analyses. The inability to recommend the elimination of large numbers of items comes from the fact that many of the factors contained only two or three items, and thus constituted a minimum number of items for a scale. In other words, all of the items in the factor would have to be included in a scale and none could be recommended for elimination. The exception to this frequently occurring pattern was on the first and occasionally the second factor in a factor structure. Here the opposite situation tends to be true. An extremely large number of items typically loaded on these factors and one could select from among the highest loading items, create a four or five item scale, and, in many cases, still have ten or 15 items which loaded on the factor that could be eliminated.

The problem lies in the fact that this first factor is virtually always a global, evaluative judgment, and involves a number of different aspects of the leader or situation which are interesting in their own right. To eliminate these items on the basis of an artifactually large first factor means that much potentially useful information would be lost. A final reason for not being able to eliminate a large number of items from the questionnaires lies in the fact that in many of the

analyses, more than a few items failed to load on any of the factors. Thus, there is no rationale for eliminating them, particularly if their content deals with an aspect of interest or relevance to the evaluation purposes of the project.

In the following paragraphs, several problems and cautions that emerged in the analyses will be presented. Then some of the more interesting and perhaps unexpected findings will be highlighted, followed by a closing section in which specific recommendations will be made.

A problem always present in interpreting multiple factor analyses is in dealing with the psychological meaning of the factors. This problem has at least three aspects in the present analyses. As indicated in Table 29, a number of factors appeared to emerge in more than one data set describing individuals. In particular, the consideration factor appeared in every description of an individual. On the face of it, this multiple appearance of the same factors can be seen as a positive characteristic of the data, for it indicates a certain amount of convergence and agreement from various perspectives within the setting. While this is undoubtedly true, it is important to realize that while we have chosen to use the same label for similar factors in different data sets, the fact remains that in no case are the factors identical. Loading sizes inevitably vary, and items present in one analysis are absent from another. Thus, while there may indeed be a common core of similarity for a particular psychological factor, the various factors also clearly differ in some aspects. ✓

This problem is most pronounced in the early factors which tend to contain large numbers of items and which, as a result, have a rather complex mixture of item contents. Thus, a global evaluative judgment of a leader which we labeled "consideration" tends to have a different meaning or emphasis, depending on who is doing the describing and who is being described. If it is considered to be desirable to have an identical scale for measuring the same dimension across all individuals, then the only strategy to follow is to select the four or five items

TABLE 29

Summary of Factors Describing Various Individuals in the Training Setting

Respondent		Subject	<u>Factors</u>											
			Consideration	Leadership/ Effectiveness	Mutual Trust	Punishment	Goal Clarity	Communication/ Participation	Feedback	Mixed Sex Training	Use of Judgment	Job Knowledge Competence	Under Pressure	Fairness
Battalion Commander	From Company Commander Questionnaire	X	X		X	X		X		X				
Company Commander	From Drill Sergeant Questionnaire	X	X	X					X			X	X	
Company Commander	From First Sergeant Questionnaire	X							X					
Command Sergeant Major	From First Sergeant Questionnaire	X	X	X						X		X		
First Sergeant	From Drill Sergeant Questionnaire	X	X	X							X		X	
Drill Sergeant	From Soldier's Questionnaire	X						X					X	

common to all of the factor structures and use them to define the scale. This has the disadvantage of eliminating the subtle but meaningful differences in the construct from individual to individual, but has the decided advantage of maintaining a constant operational definition of the construct across all individuals.

A closely related problem lies in the often inadequate labeling of factors. Because of the complexity of the item content on many of the factors, it is often not easy to select a simple and adequately descriptive label for that factor. In several cases, we used two or three synonyms in the same phrase to try to characterize the same factor. To the extent that our labeling is inadequate, then some factors which appear to be related because of the labeling may in fact not be, while others which appear to be distinct, may in fact be the same. For example, the punishment factor and the fairness of punishment factor may well be conceptually very close, but the particular set of items that happened to fall together led us to select slightly different labels. This is a highly judgmental and subjective process, and we do not feel any particular investment in the retention of one label versus another. In the final analysis, the content of the factors must determine their meaningfulness.

A pattern of results that occurred with some frequency, and which created some of the labeling problems just alluded to could, perhaps, be referred to as a "double meaning" phenomenon. In effect, two qualitatively distinct content areas tend to load together on the same factor. The most common occurrence of this type in the present set of analyses involved items related to the quality of the trainees. In general, when these items appeared in a factor, they accompanied items describing some other aspect of the situation, such as the quality of the drill sergeants. In effect then, these second content area items act as an anchor or a contrast to what we have judged to be the primary content or meaning of the factor. Thus, when a factor contains items dealing with amount of time and pressure a drill sergeant feels while at the same time containing items dealing with the quality of the trainees, we assume that

the factor is a time and pressure factor rather than a trainee quality factor. We also make the further assumption that, implicitly, the items are linked in the heads of the respondents in a sort of causal belief system. That is, the factor is really reflecting a drill sergeant saying that he is under pressure and doesn't have enough time because the quality of the trainees is declining.

This pattern is quite interesting, but creates problems in judging what the true nature of the factor is and in deciding on which items to include in a scale reflecting that factor. It is also somewhat disconcerting since in several cases it was expected that these two content areas would emerge as separate dimensions, and in fact this goal represented a major focus in the developmental stages of the project. In other words, it was thought desirable to have a quality of soldiers scale and a quality of drill sergeants scale. Factor analytically, they did not emerge separately, therefore, from that perspective there is no rationale for treating them separately. However, the goals of the evaluation requirement partly determine which items are retained and used in subsequent analyses. In a case like this, our recommendation would be to attempt to create two separate scales, each of which would hopefully have an acceptably high alpha, even though the scales may be correlated. Their different content would then be sufficient justification for creating two correlated scales.

Recommendations

Keeping in mind the constraints and problems described in the preceding paragraphs, our recommendations for performing the evaluation portion of the study and the creation of scales from these factor analyses are fairly straight-forward. In general, we recommend using items with loadings above at least .50 and, where possible, items should exceed .60. As a general strategy, the hypotheses and topics to be examined in the evaluation should be tested with the scales derived from these analyses whenever possible. Although this is the desirable state of affairs, it will often not be possible to do so. In some cases factors

do not have any close correspondence to a particular evaluation topic. In even more cases, there simply is no factor-derived scale to reflect a topic area because none emerged in the analyses. In this situation, it is only logical to use the items that were originally designed to assess a particular topic area. For example, the item dealing with whether or not short people marched in the front of a platoon never loaded on any of the factors. Nevertheless, it can easily be used to assess whether or not trainees perceived this to be occurring, and thereby tests the hypothesis that drill sergeants trained in the new POI would be more likely to carry out this requirement than would drill sergeants trained in the self-paced POI.

In addition to the size of loadings, the other factor for consideration in deciding on what items to incorporate into a particular scale, consists of content similarity. Contrast items that appeared in some of the double meaning factors should probably not be included in the scale definition. This procedure allows a conceptually cleaner interpretation of the meaning of the scale. In addition, where a similar scale exists across respondents and across stimuli, such as the recurring leadership factors, the scales should probably contain identical items in all cases, even though this approach results in some highly loading and important items being left out of some scales. However, this slight distortion of the meaning of the scale for a particular subset of individuals is more than compensated for by the resulting consistency and meaningfulness of the scale across all levels of respondent and stimulus object.

APPENDIX A

Listing of Item Codes

COMPANY COMMANDER QUESTIONNAIRE

VAR

1. If a trainee is to learn to be a good soldier, he* must experience a lot of physical and mental stress during basic training.
2. All in all, officers in this unit do a fine job.
3. I wish the trainees were of the same quality they were in the days of the draft.
4. I sometimes get the feeling that about the only kinds of people volunteering for the Army nowadays are those who have been rejected everywhere else.
5. Female trainees will eventually make as good soldiers as male trainees.
6. It's necessary to lean hard on new trainees until they begin to think less independently.
7. In order to produce a good soldier, a drill sergeant must often violate existing policies.
8. Drill sergeants have to swear at the trainees or scare them in order to control what they do.
9. I am satisfied that on graduation day, we turn out trainees who are fully prepared for either advanced training or for duty positions in field units.
10. Quite a number of trainees are sent to some helping agency (social worker, Red Cross, chaplain, etc.) on post every cycle.
11. This unit sometimes bends the rules to let trainees graduate who actually did not meet the prescribed standards on performance tests.
12. Drill sergeants can get a lot more out of the trainees by threatening to punish** them than by trying to counsel them.
13. A lot of trainees can't be made to do what is necessary, unless the drill sergeant acts like he is going to get physical with them.
14. Drill sergeants are given enough time during the cycle to teach the trainees how to "soldier."

VAR

15. Trainees could do just as well with a lot less supervision than they now get.
16. I personally think it's important to try to praise the trainees just so they don't think they're losers.
17. I am under a lot of pressure to see to it that the drill sergeants in my company do a good job of training the trainees.
18. Suggestions made by drill sergeants for improving performance in their unit are often implemented by their superiors or by the cadre.
19. Drill sergeants get good support from all of the cadre in this unit.
20. Drill sergeants get good support from the leadership at the battalion level.
21. Trainees in this unit are often abused by the drill sergeants.
22. Trainees in this unit are often abused by cadre (who are not drill sergeants).
23. Within a few weeks, most of the trainees handle self-discipline really well.
24. Trainees can be motivated to do a better job through the use of push-ups and extra running.
25. In this unit, counseling trainees is considered to be an extremely important part of training.
26. Drill sergeants seem to have more trouble understanding how to deal with trainees of the opposite sex than with trainees of their own sex.
27. Stereotypes about how badly the drill sergeants treat the trainees are often true.
28. Drill sergeants are seen as important in a very positive sense in this unit.
29. I am under a lot of pressure to see to it that the drill sergeants in my company don't abuse the trainees.

VAR

30. I think most of the trainees today join the Army:
31. _____ a. To serve their country
32. _____ b. To get training and job skills
33. Why a trainee joins the Army makes a difference in how effectively the drill sergeants can train them.
34. The only effective way for a drill sergeant to learn to deal with trainees is for the drill sergeant to get right down and do it and learn from his mistakes.
35. Drill sergeants who volunteer to be drill sergeants make better trainers than those who do not volunteer.
36. All in all, the drill sergeants in this unit do a fine job.
37. Drill sergeants don't let female trainees get out of doing things just because they're female.
38. The newer drill sergeants become better drill sergeants than the "old hands."
39. A drill sergeant can't learn how to motivate today's trainees from books or by sitting in some classroom for several days or weeks.
40. This unit encourages drill sergeants to try out the newer ideas that they bring with them out of drill sergeant school.
41. I think the Army is on track and I plan on staying in the Army for at least 20 years.
42. When we receive a new requirement or mission, the battalion commander makes sure we understand the reason for it.
43. My battalion commander comes down and tries to do a subordinate's job, even when the subordinate is performing well.
44. The battalion commander gives orders that do not violate legal policies, SOP, regulations, or the UCMJ.
45. The battalion commander makes sure that what we do in this unit is necessary to accomplish our training mission.

VAR

46. When there is a serious problem in the unit, our battalion commander involves his cadre in finding the solution by holding a group problem-solving session.
47. When there is a question about responsibilities on various unit tasks, the battalion commander holds a meeting to lay out individual responsibilities.
48. The battalion commander quickly detects differences among his people which need to be settled.
49. Even when he disagrees, the battalion commander keeps an open mind and listens to what others have to say.
50. My battalion commander encourages me when I want to try something new.
51. When something critical must be done by a member of this unit, the battalion commander checks to make sure it is done properly.
52. The battalion commander evaluates his subordinates based on their performance--not on their personalities or other factors.
53. When a subordinate does something wrong or performs a task poorly, the battalion commander personally lets him know about it.
54. When a subordinate performs a task well, the battalion commander lets him know about it.
55. When the battalion commander promises a reward (like a pass, letter of commendation, etc.), he follows through.
56. When the battalion commander warns a subordinate about something, he follows through with punishment, if the subordinate's performance does not improve.
57. Before the battalion commander punishes someone, he makes sure that he knows all the facts--the whole story.
58. Our unit permits male trainees to graduate even when they have failed to perform to standards on performance tests.

VAR

59. The battalion commander is courteous when dealing with his subordinates.
60. When someone in the unit wants to talk to him, the battalion commander manages to make himself available.
61. The battalion commander lets a person who is being counseled do most of the talking.
62. When the battalion commander is told about a touchy or embarrassing problem, he tries to side-step the issue instead of facing it head-on.
63. When the battalion commander determines that a subordinate has a serious problem, he refers the subordinate to a helping agency (social worker, Red Cross, chaplain, etc.).
64. The battalion commander meets or exceeds all Army standards for personal appearance.
65. When members of the cadre in this unit receive OERs, there are no surprises--performance is described in the same manner in which it had already been described during previous conversations.
66. During counseling sessions, the battalion commander orders, threatens, criticizes, or preaches.
67. When a subordinate asks the battalion commander for help solving a problem, he helps out.
68. The battalion commander does not punish a subordinate for poor performance, unless there is a reason to believe that the subordinate is no longer trying to perform well.
69. When I perform well, my battalion commander recognizes it with praise or a reward that means something to me.
70. The battalion commander doesn't let me do the things I was trained to do.
71. The battalion commander sees that I get guidance which allows me to do my tasks and take care of my responsibilities properly.
72. I feel confident that my battalion commander will back me up when I make decisions.

VAR

73. The battalion commander tries to run my company.
74. Often my suggestions for improving performance in this unit are implemented by my superiors or the cadre.
75. The battalion commander demands that we take into account physical differences between the male and female trainees when we conduct training.
76. The battalion commander acts quickly against members of the cadre who fraternize with trainees of the opposite sex.
77. My input is asked before decisions that affect me are made.
78. The battalion commander ensures that decisions are made at the level where the most accurate and most relevant information is to be found.
79. Whenever the battalion commander has to "chew out" a subordinate, he does it in private.
80. Whenever the battalion commander refers someone to a helping agency, he follows-up by checking to see that the agency did some good.
81. Our unit permits female trainees to graduate even when they have failed to perform to standards on performance tests.
82. Because of the battalion commander's attitude, I avoid letting him know when things aren't going the way he expects them to.
83. The drill sergeants have to work such long hours, the quality of their performance suffers.
84. There is enough time in the training cycle to allow trainees to practice new skills until they have mastered them.
85. My battalion commander exercises his own judgment and makes decisions in areas in which he has the freedom to do so.
86. During training on site, I normally see my battalion commander:
 - a. Never
 - b. Once a month or less
 - c. Once a week to once a month
 - d. Two or three times a week
 - e. Every day at least once

VAR

87. The battalion commander knows enough about my job to identify when I perform poorly.
88. The battalion commander acts as if he doesn't trust my judgment.
89. The battalion commander clearly defines the goals and priorities of this unit.
90. When I first arrived in my present assignment, the battalion commander made sure that I received training and other assistance in performing tasks which I was not already familiar with.
91. When the battalion commander establishes standards, they are reasonable--just about everyone thinks they can meet all the standards, if they work at it.
92. The battalion commander made it clear from the beginning how well we were required to perform each task--what his standards were.
93. I believe the battalion commander when he says it is OK and safe to pass information up to him, whether the information is good or bad.
94. The battalion commander's punishments seem to be fair.

FIRST SERGEANT QUESTIONNAIRE

VAR

1. If a trainee is to learn to be a good soldier, he* must experience a lot of physical and mental stress during basic training.
2. All in all, officers in this unit do a fine job.
3. I wish the trainees were of the same quality they were in the days of the draft.
4. I sometimes get the feeling that about the only kinds of people volunteering for the Army nowadays are those who have been rejected everywhere else.
5. Female trainees will eventually make as good soldiers as male trainees.
6. It's necessary to lean hard on new trainees until they begin to think less independently.
7. In order to produce a good soldier, a drill sergeant must often violate existing policies.
8. Drill Sergeants have to swear at the trainees or scare them in order to control what they do.
9. I am satisfied that on graduation day, we turn out trainees who are fully prepared for either advanced training or for duty positions in field units.
10. Quite a number of trainees are sent to some helping agency (social worker, Red Cross, chaplain, etc.) on post every cycle.
11. This unit sometimes bends the rules to let trainees graduate who actually did not meet the prescribed standards on performance tests.
12. Drill sergeants can get a lot more out of the trainees by threatening to punish* them than by trying to counsel them.

VAR

13. A lot of trainees can't be made to do what is necessary, unless the drill sergeant acts like he is going to get physical with them.
14. Drill sergeants are given enough time during the cycle to teach the trainees how to "soldier."
15. Trainees could do just as well with a lot less supervision than they now get.
16. I personally think it's important to try to praise the trainees just so they don't think they're losers.
17. The most important duties a first sergeant has are administrative.
18. Suggestions made by drill sergeants for improving performance in their unit are often implemented by their superiors or by the cadre.
19. Drill sergeants get good support from all of the cadre in their unit.
20. Drill sergeants get good support from the leadership at the battalion level.
21. Trainees in this unit are often abused by the drill sergeants.
22. Trainees in this unit are often abused by cadre (who are not drill sergeants).
23. Within a few weeks, most of the trainees handle self-discipline really well.
24. Trainees can be motivated to do a better job through the use of push-ups and extra running.
25. In this unit, counseling trainees is considered to be an extremely important part of training.
26. Drill sergeants seem to have more trouble understanding how to deal with trainees of the opposite sex than with trainees of their own sex.
27. Stereotypes about how badly the drill sergeants treat the trainees are often true.
28. Drill sergeants are seen as important in a very positive sense in this unit.

VAR

29. I think most of the trainees today join the Army:
30. _____ a. To serve their country.
31. _____ b. To get training and job skills
32. Why a trainee joins the Army makes a difference in how effectively the drill sergeants can train them.
33. The only effective way for a drill sergeant to learn to deal with trainees is for the drill sergeant to get right down and do it and learn from his mistakes.
34. Drill sergeants who volunteer to be drill sergeants make better trainers than those who do not volunteer.
35. All in all, the drill sergeants in this unit do a fine job.
36. The drill sergeants don't let female trainees get out of things just because they're female.
37. The newer drill sergeants become better drill sergeants than the "old hands."
38. A drill sergeant can't learn how to motivate today's trainees from books or by sitting in some classroom for several days or weeks.
39. This unit encourages drill sergeants to try out the newer ideas that they bring with them out of drill sergeant school.
40. In my job, I often perform the same duties as a drill sergeant.
41. It is important for a first sergeant to be involved in the evaluation of training.
42. The company commander's punishments seem to be fair.
43. When we receive a new requirement or mission, the company commander makes sure we understand the reason for it.
44. The company commander comes down and tries to do the subordinate's job, even when he is performing well.
45. The company commander gives orders that do not violate local policies, SOP, regulations, or the UCMJ.

VAR

46. The company commander makes sure that what we do in this unit is necessary to accomplish our training mission.
47. When there is a serious problem in the unit, our company commander involves his cadre in finding the solution by holding a group problem-solving session.
48. When there is a question about responsibilities on various unit tasks, the company commander holds a meeting to lay out individual responsibilities.
49. The company commander quickly detects differences among his people which need to be settled.
50. Even when he disagrees, the company commander keeps an open mind and listens to what others have to say.
51. My company commander encourages me when I want to try something new.
52. When something critical must be done by a member of this unit, the company commander checks to make sure it is done properly.
53. The company commander evaluates his subordinates based on their performance--not on their personalities or other factors.
54. When a subordinate does something wrong or performs a task poorly, the company commander personally lets him know about it.
55. When a subordinate performs a task well, the company commander lets him know about it.
56. Because of the company commander's attitude, I fail to let him know when things aren't going the way he expects them to.
57. When the company commander promises a reward (like a pass, letter of commendation, etc.), he follow through.
58. When the company commander warns a subordinate about something, he follows through with punishment, if the subordinate's performances does not improve.

VAR

59. Before the company commander punishes someone, he makes sure that he knows all the facts--the whole story.
60. Our unit permits male trainees to graduate even when they have failed to perform to standards on performance tests.
61. The company commander is courteous when dealing with his subordinates.
62. When someone in the unit wants to talk to him, the company commander manages to make himself available.
63. During counseling sessions, the company commander lets the person being counseled do most of the talking.
64. When the company commander is told about a touchy or embarrassing problem, he tries to side-step the issue instead of facing it head-on.
65. When the company commander determines that a subordinate has a serious problem, he refers the subordinate to a helping agency (social worker, Red Cross, chaplain, etc.).
66. The company commander meets or exceeds all Army standards for personal appearance.
67. When members of the cadre in this unit receive EERs, there are no surprises--performance is described in the same manner in which it had already been described during previous conversations.
68. During counseling sessions, the company commander orders, threatens, criticizes, or preaches.
69. When a subordinate asks the company commander for help solving a problem, he helps out.
70. The company commander does not punish a subordinate for poor performance, unless there is reason to believe that the subordinate is no longer trying to perform well.
71. When I perform well, my company commander recognizes it with praise or a reward that means something to me.
72. The company commander doesn't let me do the things I was trained to do.

VAR

73. The company commander sees that I get guidance which allows me to do my tasks and take care of my responsibilities properly.
74. The drill sergeants have to work such long hours, the quality of their performance suffers.
75. Often my suggestions for improving performance in this unit are implemented by my superiors or the cadre.
76. The company commander demands that we take into account physical differences between the male and female trainees when we conduct training.
77. The company commander acts quickly against members of the cadre who fraternize with trainees of the opposite sex.
78. My input is asked before decisions that affect me are made.
79. The company commander ensures that decisions are made at the level where the most accurate and most relevant information is to be found.
80. Whenever the company commander has to "chew out" a subordinate, he does it in private.
81. Whenever the company commander refers someone to a helping agency, he follows up by checking to see that the agency did some good.
82. Our unit permits female trainees to graduate even when they have failed to perform to standards on performance tests.
83. When my battalion commander has the freedom to do so, he makes decisions which affect the way I do my job.
84. The battalion commander pays attention to my needs as a first sergeant.
85. There is enough time in the training cycle to allow trainees to practice new skills until they have mastered them.
86. The company commander knows enough about my job to identify when I perform poorly.
87. The company commander acts as if he doesn't trust my judgement.
88. The company commander clearly defines the goals and priorities of this unit.

VAR

89. When I first arrived in my present assignment, the company commander made sure that I received training and other assistance in performing tasks which I was not already familiar with.
90. I believe the company commander when he says it is OK and safe to pass information up to him, whether the information is good or bad.
91. When the company commander establishes standards, they are reasonable--just about everyone thinks they can meet all the standards, if they work at it.
92. The company commander made it clear from the beginning how well we were required to perform each task--what his standards were.
93. How long have you worked with your current company commander? ____ months
94. When we receive a new requirement or mission, the Command Sergeant Major makes sure we understand the reason for it.
95. The Command Sergeant Major comes down and tries to do my job for me, even when I am performing well.
96. When something critical must be done by a member of this unit, the Command Sergeant Major checks to make sure it is done properly.
97. When an NCO does something wrong or performs a task poorly, the Command Sergeant Major personally lets him know about it.
98. When an NCO performs a task well, the Command Sergeant Major lets him know about it.
99. The Command Sergeant Major is courteous when dealing with his NCOs and privates in my unit.
100. When someone in the unit wants to talk to the Command Sergeant Major, he makes himself available.
101. The Command Sergeant Major lets a person being counseled do most of the talking.
102. When the Command Sergeant Major determines that an NCO has a serious problem, he refers him to a helping agency (social worker, Red Cross, chaplain, etc.).

VAR

103. My Command Sergeant Major performs tasks that are absolutely essential to the training session.
104. When the Command Sergeant Major is told about a touchy or embarrassing problem, he tries to side-step the issue instead of facing it head-on.
105. Whenever the Command Sergeant Major refers an NCO to a helping agency, he follows up by checking to see that the agency did some good.
106. When an NCO asks the Command Sergeant Major for help with a problem, he helps out.
107. During counseling sessions, the Command Sergeant Major orders, threatens, criticizes, or preaches.
108. The Command Sergeant Major meets or exceeds all Army standards for personal appearance.
109. My Command Sergeant Major keeps me informed about what tasks he expects me to perform.
110. When we are not too sure how the Command Sergeant Major wants a task performed, he spends time explaining and showing us how he wants it done.
111. My Command Sergeant Major demands as much from his female NCOs as he does from his male NCOs.
112. Whenever the Command Sergeant Major has to "chew out" an NCO, he does it in private.
113. When I first arrived in my present assignment, the Command Sergeant Major made sure that I received training and other assistance in performing tasks which I was not already familiar with.
114. When the Command Sergeant Major establishes standards, they are reasonable--just about everyone thinks they can meet all the standards if they work at it.
115. The Command Sergeant Major acts as if he doesn't trust my judgement.
116. The Command Sergeant Major made it clear from the beginning how well I was required to perform each task--what his standards were.

VAR

117. The Command Sergeant Major knows enough about my job to identify when I perform poorly.

DRILL SERGEANT QUESTIONNAIRE

VAR

1. I have used a good deal of what I learned in the drill sergeant course to help me successfully motivate trainees.
2. The drill sergeant course taught me the necessary skills I need to lead my trainees.
3. I use a referral list when trainees have problems I can't solve.
4. Many of the things drill sergeants learn in the drill sergeant course don't get tried in the unit.
5. The only way to learn to deal with trainees is to get right down and do it and learn from your own mistakes.
6. When I tried the leadership techniques I learned in drill sergeant school, I found that none of them worked.
7. I don't think the drill sergeant school adequately prepared me for the problems I had to face.
8. The other drill sergeant(s) discouraged me from using the leadership techniques I learned in training.
9. It is important that the physical environment on post (e.g., barracks, equipment, vehicles) be adequately maintained for me to properly train.
10. I feel pretty comfortable about the way I am evaluated as a drill sergeant.
11. The company commander knows enough about my job to identify when I perform poorly.
12. The company commander acts as if he* doesn't trust my judgment.
13. The company commander clearly defines the goals and priorities of this unit.

VAR

14. When I first arrived in my present assignment, the company commander made sure I received training and other assistance in performing tasks which I was not already familiar with.
15. I was given enough time during the cycle to teach the trainees how to "soldier."
16. There is too much emphasis on statistics (e.g., BRM, PT, IPT scores) in this unit.
17. As a drill sergeant, it is my responsibility to keep the TDP rate as low as possible by working harder with marginal trainees.
18. The training schedule/POI is frequently used as an excuse to prevent improvement of training.
19. The company commander is under a lot of pressure to see to it that I do a good job of training my trainees.
20. My company commander takes an active role in the leadership of this unit.
21. TDP rates are closely monitored by the battalion.
22. I would like to remain in this unit beyond my regular tour of duty.
23. All in all, officers in this unit do a fine job.
24. We get together as a work group to identify problems and, when possible, solve them and implement the recommended changes.
25. The whole team pitches in and helps straighten things out when one individual makes a mistake.
26. The people in this unit show that they have a lot of pride in what they are doing.
27. There is more emphasis on punishment* than on rewards in dealing with trainees in my company.
28. I fear the consequences when I tell my company commander about a mistake my subordinates or I have made.
29. When the company commander establishes standards, they are reasonable--just about everyone thinks they can meet all the standards, if they work at it.

VAR

30. The company commander made it clear from the beginning how well we were required to perform each task--what his standards were.
31. The company commander is under a lot of pressure to see to it that I don't abuse the trainees.
32. The company commander's punishments seem to be fair.
33. How long have you worked with your current company commander?
_____ months
34. My company commander knows what is going on in this unit.
35. When we receive a new requirement or mission, the company commander makes sure we understand the reason for it.
36. The company commander comes down and tries to do a subordinate's job, even when he is performing well.
37. The company commander gives orders that do not violate local policies, SOP, regulations, or the UCMJ.
38. The company commander makes sure that what we do in this unit is necessary to accomplish our training mission.
39. When there is a serious problem in the unit, our company commander involves his cadre in finding the solution by holding a group problem-solving session.
40. When there is a question about responsibilities on various unit tasks, the company commander holds a meeting to lay out individual responsibilities.
41. The company commander quickly detects differences among his people which need to be settled.
42. Even when he disagrees, the company commander keeps an open mind and listens to what others have to say.
43. My company commander encourages me when I want to try something new.

VAR

44. When something critical must be done by a member of this unit, the company commander checks to make sure it is done properly.
45. The company commander evaluates his subordinates based on their performance--not on their personalities or other factors.
46. When a subordinate does something wrong or performs a task poorly, the company commander personally lets him know about it.
47. When a subordinate performs a task well, the company commander lets him know about it.
48. Because of the company commander's attitude, I fail to let him know when things aren't going the way he expects them to.
49. When the company commander promises a reward (like a pass, letter of commendation, etc.), he follows through.
50. When the company commander warns a subordinate about something, he follows through with punishment, if the subordinate's performance does not improve.
51. Before the company commander punishes someone, he makes sure that he knows all the facts--the whole story.
52. Our unit permits male trainees to graduate even when they have failed to perform to standards on performance tests.
53. The company commander is courteous when dealing with his subordinates.
54. When someone in the unit wants to talk to him, the company commander manages to make himself available.
55. The company commander lets a person being counseled do most of the talking.
56. When the company commander is told about a touchy or embarrassing problem, he tries to side-step the issue instead of facing it head-on.
57. When the company commander determines that a subordinate has a serious problem, he refers the subordinate to a helping agency (social worker, Red Cross, chaplain, etc.).

VAR

58. The company commander meets or exceeds all Army standards for personal appearance.
59. There is enough time in the training cycle to allow trainees to practice new skills until they have mastered them.
60. When the drill sergeants in this unit receive EERs, there are no surprises--performance is described in the same manner in which it had already been described during previous conversations.
61. During counseling sessions, the company commander orders, threatens, criticizes, or preaches.
62. When a subordinate asks the company commander for help solving a problem, he helps out.
63. The company commander does not punish a subordinate for poor performance, unless there is reason to believe that the subordinate is no longer trying to perform well.
64. When I perform well, my company commander recognizes it with praise or a reward that means something to me.
65. The company commander doesn't let me do the things I was trained to do.
66. The company commander sees that I get guidance which allows me to do my tasks and take care of my responsibilities properly.
67. I feel confident that my company commander will back me up when I make decisions.
68. Often my suggestions for improving performance in this unit are implemented by my superiors or the cadre.
69. The company commander demands that we take into account physical differences between the male and female trainees when we conduct training.
70. The company commander acts quickly against members of the cadre who fraternize with trainees of the opposite sex.
71. My input is asked before decisions that affect me are made.

VAR

72. The company commander ensures that decisions are made at the level where the most accurate and most relevant information is to be found.
73. Whenever the company commander has to "chew out" a subordinate, he does it in private.
74. Whenever the company commander refers someone to a helping agency, he follows up by checking to see that the agency did some good.
75. Our unit permits female trainees to graduate even when they have failed to perform to standards on performance tests.
76. When my battalion commander has the freedom to do so, he makes decisions which affect the way I do my job.
77. I have to work such long hours, the quality of my performance suffers.
78. New trainees think too independently and need to be leaned on hard for a while.
79. If a trainee is to learn to be a good soldier, he must experience a lot of physical and mental stress during basic training.
80. You've got to swear at the trainees or scare them in order to control what they do.
81. I wish the trainees were of the same quality they were in the days of the draft.
82. I sometimes get the feeling that about the only kinds of people volunteering for the Army nowadays are those who have been rejected everywhere else.
83. This would have been a much better unit, if some of the trainees had been "weeded out" earlier by use of the Trainee Discharge Program.
84. I am satisfied that on graduation day, we turn out trainees who are fully prepared for either advanced training or for duty positions in field units.
85. I think most of the trainees today join the Army:
86. _____ a. To serve their country
87. _____ b. To get training and job skills

VAR

88. Why a trainee joins the Army makes a difference in how effectively I can train him.
89. The most important thing a trainee should know is basic soldiering skills.
90. I can get a lot more out of the trainees by threatening to punish them than I can by trying to counsel them.
91. A lot of trainees can't be made to do what is necessary, unless the drill sergeant acts like he is going to get physical with them.
92. I feel I am free to discipline trainees as much as I should be.
93. Some of the things we are supposed to do to teach the trainees are just theories that can't be applied as effectively as old-fashioned fear.
94. My trainees could do just as well with a lot less supervision from me.
95. I personally think it's important to try to praise the trainees just so they don't think they're losers.
96. After about 3 weeks in the cycle, I don't have to "lean" on the trainees as much.
97. Within a few weeks, most of the trainees handle self-discipline really well.
98. Trainees can be motivated to do a better job through the use of push-ups and extra running.
99. I send quite a number of trainees to some helping agency on post every cycle.
100. In this unit, it is considered that counseling trainees is an extremely important part of training.
101. For reinforcement training, I often have to teach subjects that I am not familiar with.
102. I feel that I don't have enough power to control my trainees.
103. I get along well with the other drill sergeants.

VAR

- 104. The other drill sergeant(s) think(s) that I am too soft on the trainees.
- 105. I am more likely to use punishment than the other drill sergeant(s).
- 106. Having another drill sergeant(s) in the platoon relieves a lot of the stress.
- 107. Our unit gets very good maintenance support (of barracks, equipment, vehicles, etc.) from this post.
- 108. I holler and scream more than the other drill sergeant(s).
- 109. There is a place for female trainees in the kind of training we are supposed to be doing.
- 110. I would be upset if I had to train a female platoon.
- 111. I don't let female trainees get out of things just because they're female.
- 112. It's almost impossible to find time to send trainees with problems to one of the agencies on post that might help them.
- 113. Many times my job and my family pull me in opposite directions.
- 114. Our female trainees will eventually make as good soldiers as male trainees.
- 115. If I could, I'd get out from under the "hat" right now.
- 116. My family wants me to leave the Army because its demands interfere with my family life.
- 117. I have a lot more trouble understanding how to deal with trainees of the opposite sex than with trainees of my own sex.
- 118. I sometimes think I could break under all of the pressure that I'm getting.
- 119. I get a lot of understanding from my family when things are not going well on the job.
- 120. All in all, drill sergeants in this unit do a fine job.
- 121. The amount of work I have to do is reasonable.

VAR

- 122. My family is not interested in my work.
- 123. Lately I've been tense about my work.
- 124. I never have trouble keeping my private or family life from influencing how I handle my trainees.
- 125. After a day's work, I frequently go home with a headache.
- 126. I hardly every worry about my job.
- 127. When I first wake up in the morning and think of going to work, I get a stomach ache.
- 128. All in all, I'm satisfied with my job.
- 129. Our first sergeant made it clear from the beginning how well we were required to perform each task--what his standards were.
- 130. My first sergeant knows enough about my job to identify when I perform poorly.
- 131. The first sergeant acts as if he doesn't trust my judgment.
- 132. When I first arrived in my present assignment, my first sergeant made sure that I received training and other assistance in performing tasks which I was not already familiar with.
- 133. The first sergeant's punishments seem to be fair.
- 134. Our first sergeant keeps us informed about what tasks he expects us to perform.
- 135. When we receive a new requirement or mission, the first sergeant makes sure we understand the reason for it.
- 136. When a subordinate is performing well, the first sergeant comes down and tries to do the subordinate's job.
- 137. The first sergeant gives orders that do not violate local policies, SOP, regulations, or the UCMJ.
- 138. The first sergeant makes sure that what he tells us to do is necessary to accomplish our training mission.

VAR

139. When the first sergeant establishes standards, they are reasonable--just about everyone thinks they can meet all the standards, if they work at it.
140. Our first sergeant demands that we take into account physical differences between male and female trainees when we conduct training.
141. When someone in the unit wants to talk to him, the first sergeant makes himself available.
142. When something critical must be done by a member of this unit, the first sergeant checks to make sure it is done properly.
143. When the first sergeant is told about a touchy or embarrassing problem, he tries to side-step the issue instead of facing it head-on.
144. The first sergeant lets a person being counseled do most of the talking.
145. When the first sergeant determines that a subordinate has a serious problem, he refers the subordinate to a helping agency (social worker, Red Cross, chaplain, etc.).
146. Whenever the first sergeant refers a subordinate to a helping agency, he follows up by checking to see that the agency did some good.
147. During counseling sessions, the first sergeant orders, threatens, criticizes, or preaches.
148. The first sergeant evaluates his subordinates based on their performance--not on their personalities or other factors.
149. When a subordinate does something wrong or performs a task poorly, the first sergeant personally lets him know about it.
150. When a subordinate performs a task well, the first sergeant lets him know about it.
151. The first sergeant is courteous when dealing with his subordinates.
152. The first sergeant does not punish a subordinate or recommend him for punishment for poor performance, unless there is reason to believe that the subordinate is no longer trying to perform well.

VAR

153. When the first sergeant promises a subordinate a reward (like a pass, letter of commendation, etc.), he follows through.
154. When the first sergeant rewards me for good performance, he gives me a reward that means something to me.
155. When the first sergeant warns a subordinate about something, he follows through with punishment, if the subordinate's performance does not improve.
156. Before the first sergeant punishes someone or recommends punishment, he makes sure that he knows the facts--the whole story.
157. Whenever the first sergeant has to "chew out" a subordinate, he does it in private.
158. The first sergeant acts quickly against members of the cadre who fraternize with trainees of the opposite sex.
159. When a subordinate asks the first sergeant for help solving a problem, he helps out.
160. The first sergeant meets or exceeds all Army standards for personal appearance.

SOLDIER'S QUESTIONNAIRE

VAR

1. I feel that I am serving my country well by being in the Army.
2. I'm sorry that I enlisted in the Army.
3. There was a lot of competition among platoons.
4. All the things I am learning now are important for a soldier to know.
5. I look forward to my Army job after I finish training.
6. The training I received was hard and made me show how well I could do.
7. We are happy in this platoon.
8. I would like to make the Army a career.
9. Most trainees can be left without someone to watch them and still do all they are supposed to do.
10. If I could get out of the Army at any time, I would get out right now.
11. Drill sergeants don't let female trainees get out of doing things just because they are female.
12. The drill sergeants in this unit often give conflicting orders, telling us to do things differently.
13. The drill sergeants had enough time during the cycle to teach us how to be good soldiers.
14. Right now, because of the training I've received, I am sure I can hit targets with my weapon.
15. Right now, I am sure my body is in very good physical condition (due to physical training).
16. There was enough time during the training cycle to allow us to practice new skills until we had mastered them.

FIRST LISTED

DS

1. My drill sergeant was always on my back.
2. After the first couple of weeks, I did things on my own without being told to do them by my drill sergeant.
3. Our drill sergeant is such a good soldier, he* could show us how to best perform our tasks.
4. Our drill sergeant "made work" just to keep us busy when we didn't have anything important to do.
5. My drill sergeant picked on me.
6. Whenever our platoon marched in formation, short people were in the front.
7. During the first few days of training, when we were breaking in our boots, our drill sergeant didn't make us run.
8. My drill sergeant did not treat us very badly or abuse us.
9. My drill sergeant made me feel like a "winner" when I did something well.
{My drill sergeant showed us he was an expert in:
 10. {Basic rifle marksmanship.
 11. {First aid.
 12. {Military customs and courtesies.
 13. {Physical readiness training.
14. My drill sergeant made both male and female trainees meet the required standards in order to graduate.
15. My drill sergeant's personal appearance was "squared away."
16. My drill sergeant was in excellent physical condition.
17. My drill sergeant treated me the same as he treated everyone else.

DS

18. Overall, my drill sergeant did a very good job.
19. My drill sergeant had trouble working with trainees of the opposite sex.
20. My drill sergeant showed favoritism for certain trainees in our unit.
21. Punishments* my drill sergeant gave seemed to be fair.
22. My drill sergeant helped me to solve my problems.
23. Our drill sergeant didn't cut anyone any "slack," unless there was a very good reason.
24. Whenever we got ready to perform a new task for the first time, the drill sergeant made sure we understood what he wanted us to do.
25. Whenever we got ready to perform a new task for the first time, the drill sergeant made sure we understood when we had to do it.
26. Whenever we got ready to perform a new task for the first time, the drill sergeant made sure we understood where we had to do it.
27. Whenever we got ready to perform a new task for the first time, the drill sergeant made sure we understood how well we had to do it.
28. Whenever we got ready to perform a new task for the first time, the drill sergeant made sure we understood what would happen to us, if we did it right.
29. Whenever we got ready to perform a new task for the first time, the drill sergeant made sure we understood how we had to do it.
30. My drill sergeant had to work such long hours, he looked too tired to train us.
31. When I didn't know exactly what my drill sergeant wanted me to do, he would spend time explaining and showing me how he wanted it done.
32. When we received a new requirement or mission, the drill sergeant made sure we understood the reason for it.

DS

33. When we asked our drill sergeant for help solving a problem, he helped out.
34. My drill sergeant's standards were reasonable--I knew I could meet all the standards, if I worked at it.
35. When I finished a task, my drill sergeant told me how well I did.
36. Our drill sergeant checked us to make sure we performed each task the way he wanted it done.
37. Our drill sergeant checked trainees with bad attitudes a lot more often than he checked the other trainees.
38. If you don't do what you are supposed to, the whole unit may be punished for it.
39. When a trainee did something wrong or performed a task poorly, the drill sergeant personally let him know about it.
40. When a trainee performed a task well, the drill sergeant let him know about it.
41. Our drill sergeant kept us informed about how well he thought we were doing in training.
42. Our drill sergeant seemed to rate us by how well we performed in training--not other things like personality, race, or sex.
43. Our unit permits female trainees to graduate even when they have failed to perform to standards on performance tests.
44. When a trainee broke down and cried, the drill sergeant didn't holler or make fun of him.
45. My drill sergeant did not punish a trainee for poor performance, unless the trainee was no longer trying to perform.
46. When my drill sergeant promised a trainee a reward (like a pass, or another privilege), he followed through and made sure the trainee got it.
47. When my drill sergeant rewarded me for good performance, he gave a reward that meant something to me.

DS

48. When my drill sergeant warned a trainee about something, he followed through with punishment, if the trainee's performance did not improve.
49. When my drill sergeant was told about a touchy or embarrassing problem, he tried to side-step the issue instead of facing it head-on.
50. Before my drill sergeant punished someone, he made sure that he knew all the facts--the whole story.
51. When I wanted to talk to my drill sergeant, he made himself available.
52. When my drill sergeant determined that a trainee had a serious problem, he referred the trainee to a helping agency (social worker, Red Cross, chaplain, etc.).
53. Whenever my drill sergeant referred a trainee to a helping agency, he followed-up by checking to see that the agency did some good.
54. When I had a problem, I went to my drill sergeant to talk things out.
55. When I went to my drill sergeant for help, he listened well and cared about what I said.
56. During counseling sessions, my drill sergeant ordered, threatened, criticized, or preached.
57. I tried out the things my drill sergeant told me to do after he advised (counseled) me about some problems.
58. Our drill sergeant tried to scare us into doing what he wanted.
59. Our unit permits male trainees to graduate even when they have failed to perform to standards on performance tests.
60. My drill sergeant got along well with other drill sergeants.
61. My drill sergeant spent most of his time helping us prepare for tests.
62. My drill sergeant was very concerned with our scores on BRM, end of cycle tests, etc.

SECOND LISTED

DS

101. My drill sergeant was always on my back.
102. After the first couple of weeks, I did things on my own without being told to do them by my drill sergeant.
103. Our drill sergeant is such a good soldier, he* could show us how to best perform our tasks.
104. Our drill sergeant "made work" just to keep us busy when we didn't have anything important to do.
105. My drill sergeant picked on me.
106. Whenever our platoon marched in formation, short people were in the front.
107. During the first few days of training, when we were breaking in our boots, our drill sergeant didn't make us run.
108. My drill sergeant did not treat us very badly or abuse us.
109. My drill sergeant made me feel like a "winner" when I did something well.
{My drill sergeant showed us he was an expert in:
 110. {Basic rifle marksmanship.
 111. {First aid.
 112. {Military customs and courtesies.
 113. {Physical readiness training.
114. My drill sergeant made both male and female trainees meet the required standards in order to graduate.
115. My drill sergeant's personal appearance was "squared away."
116. My drill sergeant was in excellent physical condition.
117. My drill sergeant treated me the same as he treated everyone else.

DS

- 118. Overall, my drill sergeant did a very good job.
- 119. My drill sergeant had trouble working with trainees of the opposite sex.
- 120. My drill sergeant showed favoritism for certain trainees in our unit.
- 121. Punishments* my drill sergeant gave seemed to be fair.
- 122. My drill sergeant helped me to solve my problems.
- 123. Our drill sergeant didn't cut anyone any "slack," unless there was a very good reason.
- 124. Whenever we got ready to perform a new task for the first time, the drill sergeant made sure we understood what he wanted us to do.
- 125. Whenever we got ready to perform a new task for the first time, the drill sergeant made sure we understood when we had to do it.
- 126. Whenever we got ready to perform a new task for the first time, the drill sergeant made sure we understood where we had to do it.
- 127. Whenever we got ready to perform a new task for the first time, the drill sergeant made sure we understood how well we had to do it.
- 128. Whenever we got ready to perform a new task for the first time, the drill sergeant made sure we understood what would happen to us, if we did it right.
- 129. Whenever we got ready to perform a new task for the first time, the drill sergeant made sure we understood how we had to do it.
- 130. My drill sergeant had to work such long hours, he looked too tired to train us.
- 131. When I didn't know exactly what my drill sergeant wanted me to do, he would spend time explaining and showing me how he wanted it done.
- 132. When we received a new requirement or mission, the drill sergeant made sure we understood the reason for it.

DS

133. When we asked our drill sergeant for help solving a problem, he helped out.
134. My drill sergeant's standards were reasonable--I knew I could meet all the standards, if I worked at it.
135. When I finished a task, my drill sergeant told me how well I did.
136. Our drill sergeant checked us to make sure we performed each task the way he wanted it done.
137. Our drill sergeant checked trainees with bad attitudes a lot more often than he checked the other trainees.
138. If you don't do what you are supposed to, the whole unit may be punished for it.
139. When a trainee did something wrong or performed a task poorly, the drill sergeant personally let him know about it.
140. When a trainee performed a task well, the drill sergeant let him know about it.
141. Our drill sergeant kept us informed about how well he thought we were doing in training.
142. Our drill sergeant seemed to rate us by how well we performed in training--not other things like personality, race, or sex.
144. When a trainee broke down and cried, the drill sergeant didn't holler or make fun of him.
145. My drill sergeant did not punish a trainee for poor performance, unless the trainee was no longer trying to perform.
146. When my drill sergeant promised a trainee a reward (like a pass, or another privilege), he followed through and made sure the trainee got it.
147. When my drill sergeant rewarded me for good performance, he gave a reward that meant something to me.

DS

148. When my drill sergeant warned a trainee about something, he followed through with punishment, if the trainee's performance did not improve.
149. When my drill sergeant was told about a touchy or embarrassing problem, he tried to side-step the issue instead of facing it head-on.
150. Before my drill sergeant punished someone, he made sure that he knew all the facts--the whole story.
151. When I wanted to talk to my drill sergeant, he made himself available.
152. When my drill sergeant determined that a trainee had a serious problem, he referred the trainee to a helping agency (social worker, Red Cross, chaplain, etc.).
153. Whenever my drill sergeant referred a trainee to a helping agency, he followed-up by checking to see that the agency did some good.
154. When I had a problem, I went to my drill sergeant to talk things out.
155. When I went to my drill sergeant for help, he listened well and cared about what I said.
156. During counseling sessions, my drill sergeant ordered, threatened, criticized, or preached.
157. I tried out the things my drill sergeant told me to do after he advised (counseled) me about some problems.
158. Our drill sergeant tried to scare us into doing what he wanted.
160. My drill sergeant got along well with other drill sergeants.
161. My drill sergeant spent most of his time helping us prepare for tests.
162. My drill sergeant was very concerned with our scores on BRM, end of cycle tests, etc.